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REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 2001 FAPRI/AFPC BASELINE

AFPC Working Paper 01-1

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Executive Summary

The primary objective of the analysis is to determine the representative crop and livestock farms' economic viability throughout the next five years 2001-2005. The representative farm economic data is developed in cooperation with panels of producers to describe and simulate representative crop, livestock, and dairy farms. Projected prices, policy variables, and input inflation rates are obtained from the Food and Agricultural Policy Research Institute (FAPRI) January 2001 Baseline.

- Thirty-two of the 42 crop farms have more than a 50 percent chance of cash flow deficits over the 2001-2005 period. Currently, low crop prices and the prospect for a slow recovery are the major factors behind the poor cash flow performance of the crop farms.

- Fourteen of the 15 feedgrain farms have probabilities greater than 50 percent that they will experience cash flow problems in 2001-2005. Nine of the 15 farms have probabilities greater than 50 percent of losing real net worth between 2000 and 2005. In summary, the financial condition of the 15 feedgrain farms is rated as follows: thirteen are poor, two are marginal, and none are in good financial condition by 2005.

- Six of the 10 wheat farms have a greater than 50 percent probability they will experience cash flow problems in 2001-2005. Six of the farms have greater than a 50 percent chance of losing real net worth by 2005. In summary, six of the 10 wheat farms are likely to be in poor financial condition by 2005, two are marginal, and two are in good financial condition.

- Eight of the 9 cotton farms are projected to have greater than a 50 percent chance of cash flow deficits in 2001-2005. Seven of the 9 will face high probabilities of losing real net worth. Seven of the 9 cotton farms will be in poor financial condition by 2005, two are marginal, and none are in good financial condition.

- All of the 8 rice farms are projected to have greater than a 50 percent chance of cash flow deficits over the 2001-2005 planning horizon. Five of the farms will likely have high probabilities of losing real net worth. Overall, six farms will be in poor financial shape, and two will be in marginal shape by 2005.

- The dairy farms appear in moderate to poor financial shape over the 2001-2005 period. Low feed costs and higher cattle prices are not able to fully offset lower milk prices. Fifteen of the 26 farms have high probabilities of cash flow deficits. In summary, 14 of the 26 dairy farms are classified in poor financial condition, three are marginal, and 9 are in good financial condition by 2005.

- Increasing cattle prices over the planning horizon help to improve the financial viability of cattle operations. One of the four cattle operations will likely be in poor financial condition in 2005, and three are in good financial shape.

- Higher hog prices following the low prices in 1998 and 1999 improve the financial condition of the representative hog farms over the recent past. Only one of the 6 farms is expected to have high probabilities of cash flow deficits over the 2001-2005 planning horizon. In summary, one of the 6 farms is classified as being in poor financial condition in 2005, two are marginal, and three are in good financial condition.

Financial Risk Feed Grain Farms

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2001-2005	2001-2005
IAG950	64 – 90	14 – 65
IAG2400	64 – 58	18 – 50
NEG900	70 – 37	15 – 11
NEG1300	45 – 99	15 – 41
MOCG1700	70 – 53	10 – 22
MOCG3300	71 – 56	12 – 34
MONG1400	99 – 99	64 – 99
TXNP1600	71 – 79	61 – 61
TXNP6700	84 – 62	54 – 56
TXBG2000	99 – 99	90 – 99
TXBG2500	83 – 82	65 – 99
TNG900	99 – 99	75 – 99
TNG2400	97 – 97	84 - 92
SCG1500	71 – 93	46 – 90
SCG3500	63 – 52	27 – 44

< 25%	25-50%	>50%

Financial Risk Wheat Farms

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2001-2005	2001-2005
WAW1500	99 - 97	84 – 94
WAW4250	86 – 81	35 – 83
NDW1760	67 - 58	55 – 60
NDW4850	61 - 41	24 – 28
KSSW1385	79 - 81	32 – 58
KSSW3180	42 - 49	10 – 1
KSNW2325	93 - 94	73 – 85
KSNW4300	90 - 97	74 – 97
COW2700	14 - 10	1 – 1
COW5440	24 - 10	1 – 1

< 25%	25-50%	>50%

Financial Risk Cotton Farms

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2001-2005	2001-2005
CAC2000	98 - 98	79 – 99
CAC6000	87 - 93	76 – 85
TXSP1682	99 - 97	47 – 64
TXSP3697	56 - 60	22 – 21
TXRP2500	95 - 99	68 – 81
TXBC1400	71 - 74	50 – 76
TXCB1720	52 - 47	48 – 26
TNC1675	99 - 99	89 – 96
TNC3800	84 - 89	48 - 85

< 25%	25-50%	>50%

Financial Risk Rice Farms

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2001-2005	2001-2005
CAR424	99 – 99	99 – 99
CAR1365	99 – 99	99 – 99
TXR2118	90 – 92	75 – 96
TXR3750	95 – 97	78 – 99
MOER4000	28 – 53	3 – 3
MOWR4000	45 – 56	21 – 28
ARR3640	63 – 55	14 – 21
LAR1100	99 – 99	99 - 99

< 25%	25-50%	>50%

Financial Risk Dairy Farms

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2001-2005	2001-2005
CAD1710	18 - 15	1 – 1
NMD2000	54 - 54	21 – 32
WAD185	56 - 55	9 – 6
WAD900	61 - 73	28 – 42
IDD750	62 - 36	23 – 24
IDD2100	18 - 1	1 – 1
TXCD400	99 - 99	89 – 99
TXCD825	1 - 1	1 – 1
TXED310	99 - 91	45 – 75
TXED750	58 – 56	24 – 40
WID70	83 - 62	20 – 28
WID600	79 - 63	42 – 56

< 25%	25-50%	>50%

Financial Risk Dairy Farms Cont.

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2001-2005	2001-2005
MIED200	99 - 96	43 – 75
MICD140	99 – 99	58 – 98
NYWD800	16 – 11	1 – 1
NYWD1200	6 – 8	1 –1
NYCD110	4 – 1	1 – 1
NYCD400	1 – 1	1 – 1
VTD134	99 – 99	42 – 90
VTD350	75 – 88	31 – 73
MOD85	99 – 99	77 – 99
MOD330	33 – 38	5 – 1
GAND200	99 – 99	75 – 99
GASD700	18 – 7	2 – 1
FLND500	16 – 10	1 – 1
FLSD1800	99 – 97	43 – 83

< 25%	25-50%	>50%

Financial Risk Cow Calf Ranches

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2001-2005	2001-2005
MTB500	99 - 7	15 – 2
WYB300	99 - 18	1 – 17
COB250	69 - 31	1 – 99
MOB150	23 - 1	5 – 1

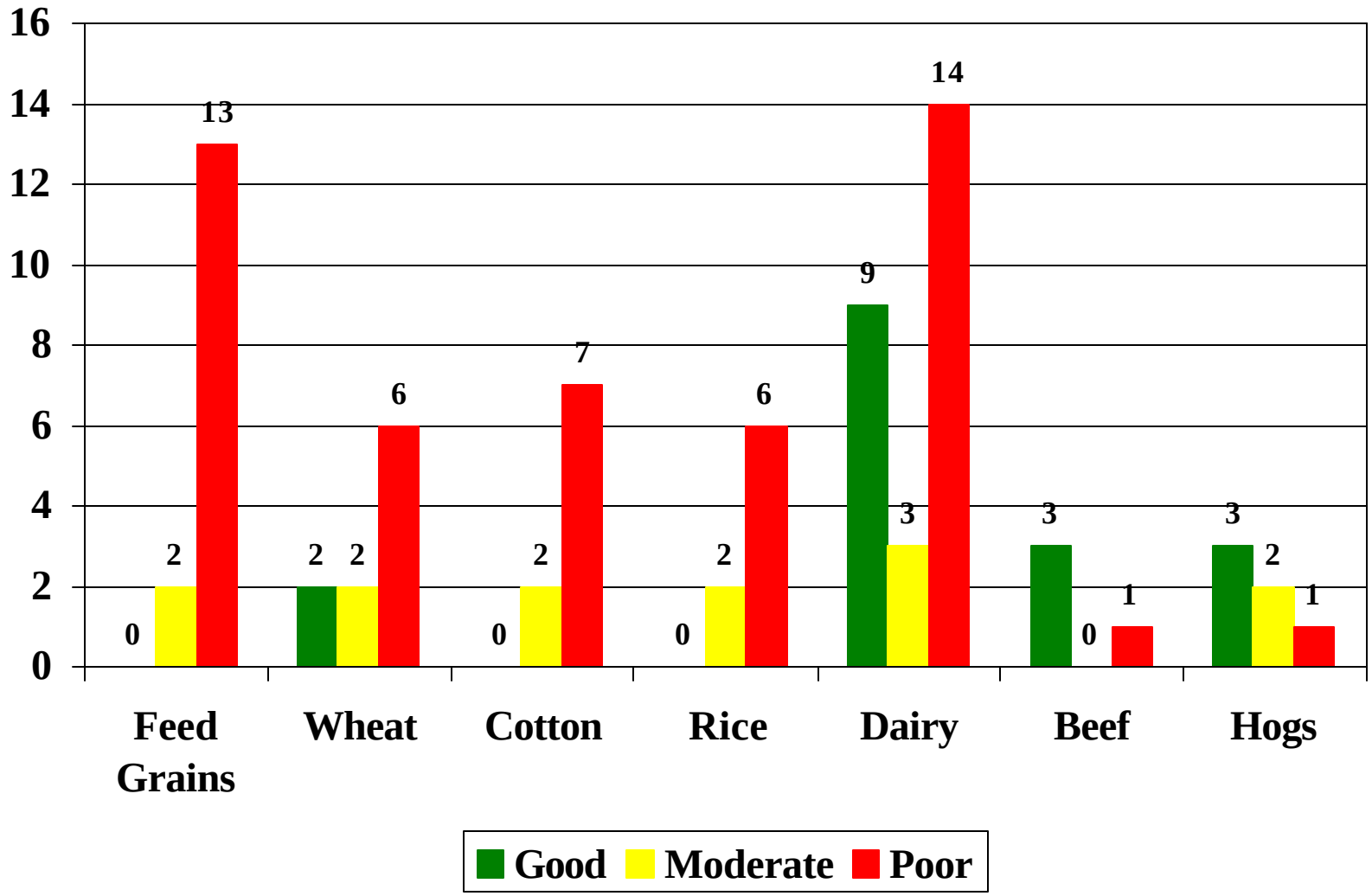
< 25%	25-50%	>50%

Financial Risk Hog Farms

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2001-2005	2001-2005
ILH180	62 - 47	20 – 14
ILH650	43 - 22	12 – 3
INH200	99 - 99	63 – 99
INH1200	60 – 36	38 – 26
NCH350	34 – 14	31 – 4
NCH13268	28 - 14	35 - 4

< 25%	25-50%	>50%

Summary of Overall Economic Viability for Representative Crop, Dairy, and Livestock Farms 2001-2005



REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 2001 FAPRI/AFPC BASELINE

The farm level economic impacts of projected long term prices under the Federal Agriculture Improvement and Reform Act of 1996 (FAIR) on representative crop and livestock operations are projected in this report. For this report the FAIR Act will be referred to as the 1996 Farm Bill. The analysis was conducted over the 1996-2005 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

- Producer panel cooperation to develop economic information to describe and simulate representative crop, livestock, and dairy farms.

- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) January 2001 Baseline.

The primary objective of the analysis is to determine the farms' economic viability by region and commodity throughout the life of the 1996 Farm Bill and beyond.

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the January 2001 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing annual cash flow deficits and the probability of having to externally refinance cash flow deficits are provided to show the financial risk faced by the representative farms. The probability of a farm losing real net worth is included as an indicator of the equity risk facing farms through the year 2005.

This report is organized into ten sections. The first section summarizes the process used to develop the representative farms and the key assumptions utilized for the farm level analysis. The second section summarizes the FAPRI January 2001 Baseline and the policy and price assumptions used for the representative farm analyses. The third through sixth sections present the results of the simulation analyses for feed grain, wheat, cotton, and rice farms. The seventh through ninth sections summarize simulation results for dairy, cattle and hog farms. Two appendices constitute the final section of the report. Appendix A provides tables to summarize the physical and financial characteristics for each of the representative farms. Appendix B provides the names of producers, land grant faculty, and industry leaders who cooperated in the panel interview process.

Panel Process

AFPC has developed and maintains data to simulate more than 80 representative crop and livestock farms chosen from major production areas across the United States (Figure 1). Characteristics for each of the farms in terms of location, size, crop mix, assets, and average receipts are summarized in Appendix A. The location of these farms is primarily the result of discussions with staffers for the House and Senate Agriculture Committees. Information necessary to simulate the economic activity on these representative farms is developed from panels of producers using a consensus building interview process. Normally two farms are developed in each region using separate panels of producers: one is representative of moderate size full-time farm operations, and the second panel usually represents farms two to three times larger.

Representative Farms and Ranches

The data collected from the panel farms are analyzed in the whole farm simulation model (FLIPSIM) developed by AFPC. The producer panels are provided pro-forma financial statements for their representative farm and are asked to verify the accuracy of simulated results for the past year and the reasonableness of a four to five year projection. Each panel must approve of the model's ability to reasonably reflect the economic activity on their representative farm prior to using the farm for policy analyses.

Most of the farms used in the analysis have been updated with the panels through 1999. All of the crop farms are assumed to begin 1996 with 20 percent intermediate- and long-term debt, based on information provided by ERS-USDA and the panel members. Initial debt levels in 1996 for dairy farms were set at 30 percent; initial debt levels for beef cattle ranches were 1 percent for land and 5 percent for cattle and machinery; and initial debt levels for hog farms were 45 percent. The debt levels the farms have at the outset of 2000 are based on simulating the farms using actual local yields and prices for 1996, 1997, 1998, 1999, and 2000.

Key Assumptions

- All farms classified as moderate scale are the size (acres or number of livestock) considered to be representative of a majority of full-time commercial farming operations in the study area. In many regions, a second farm, two to three times larger than the moderate scale farm is developed as an indicator of size economies.

- Dairy, hog, and cattle herd sizes are held constant for all farms over the 1996-2005 planning horizon.

- The farm was structured so government payment limits were not effective at reducing contract payments and loan deficiency payments.

- Minimum family living withdrawals were assumed at a base rate of 10 percent of gross receipts or $25,000 annually, whichever is lower. Actual family living withdrawals are determined by historical consumption patterns. Therefore, as the farm's profitability increases so does the level of family living withdrawals.

- The farm is subject to owner/operator federal (income and self-employment) and state income taxes as a sole proprietor, based on the current tax provisions.

- No off-farm-related income including family employment was included in the analyses. Therefore, the farm reflects only the ability of the farm to provide for family living and capital replacement.

- Farm program parameters, average annual prices, crop and livestock yield trends, interest rates, and input cost inflation (deflation) are based on the January 2001 FAPRI Baseline which assumes implementation of the 1996 Farm Bill through 2005.

- Contract payments for participating cotton, wheat, feed grain, and rice producers are made based on 85 percent of their historical base acreage times farm program yield times a contract payment rate. The contract payment rate is included in the January 2001 FAPRI Baseline.

- The farms are assumed to be enrolled in the production flexibility program and take full advantage of the flexibility provisions in the 1996 Farm Bill (within the current crop mix). PFC payments are held constant in 2003-2005 at their 2002 levels. Crop mix changes after 1999 were estimated based on projected net returns for each of the enterprises currently produced on the farms. During the

update process most of the crop farm panels indicated that they would flex out of their current crop mix, but only if expected net returns per acre from the change exceeded $40, due to rotation and/or other cultural concerns.

Marketing loan provisions for cotton, rice, wheat, feed grains, and soybeans were authorized in the 1996 Farm Bill and are assumed to be in place for the farm level analysis.

The farm level simulation model incorporates price and yield risk faced by farmers. Historical yield variability for crops and production for livestock (sale weights and milk/cow) over the past ten years are assumed to prevail for the planning horizon. Market prices for crops and feedstuffs are assumed to be more variable than over the past ten years due to the 1996 Farm Bill provisions, based on recent research by FAPRI. The assumed increase in relative price variability is: 57 percent for feed grains, 40 percent for wheat, 57 percent for soybeans, 34 percent for cotton, 10 percent for rice, 10 percent for cattle and hogs and 50 percent for milk. Random prices are appropriately correlated based on historical correlations, among crop and livestock prices, both within year and across years.

To simulate the historical portion of the planning horizon (1996-2000) crop yields were held constant based on actual values obtained from the producers. Average yields for 2001-2005 were simulated based on the average yields provided by the producers and the historical yield variability for the farm. Prices were held constant at producer provided values for 1996-2000. FAPRI's January Baseline prices were localized for the farms and used as the average prices for 2001-2005.

The 1996 Farm Bill eliminated the dairy assessments after 1996 and provides for a reduction in the milk support price starting in 1997. Each year the dairy support price falls 15 cents per hundred weight until the support price reaches $9.90 per hundred weight in 1999. Support price remains at $9.90/cwt. in 2000 and is eliminated thereafter.

Market loss assistance payments and disaster provisions passed in late 1998, 1999, and again in 2000 have been incorporated.

All farms are assumed to carry MPCI at the 50/100 level.

FAPRI January 2001 Baseline

Projected crop prices for FAPRI's January 2001 Baseline are summarized in Table 1. Corn prices decline from the high of $2.71/bu. in 1996 to a low of $1.82/bu. in 1999, but are projected to increase marginally until they reach $2.24/bu. in 2005. Wheat prices have declined to $2.48/bu. in 1999, but are expected to increase through 2005 when wheat prices are projected at $3.17/bu. Cotton prices continue their decline until 1999 reaching a low of $0.4490/lb. and then increase gradually to $0.5731/lb. in 2005. Rice prices have declined from the $7.35/cwt. level realized in 1996 to $4.63/cwt. in 1999, but are expected to recover slightly to $5.06/cwt. by 2005.

Assumed loan rates and projected annual contract (AMTA) payment rates, net of 1995 deficiency repayments in 1996 and 1997, are also summarized in Table 1. The farms growing contract commodities were assumed to have accepted the 1995 advance deficiency payments and had the repayments offset against 1996 contract payments for wheat, barley, oats, and upland cotton and the 1997 contract payments for corn and soybeans. The assumed contract or AMTA payment rates for 1998, 1999 and 2000 reflect the increase for the 1998, 1999 and 2000 market loss assistance payments authorized in those years. Annual contract payments for 2002 are assumed to remain constant for 2003, 2004 and 2005.

Projected livestock prices for FAPRI's January 2001 Baseline are summarized in Table 2. Beef cattle prices are projected to increase throughout most of the planning horizon after the drought induced decline in 1998. Actual feeder cattle prices were $61.31 and $81.34/cwt. for 1996 and 1997, but declined to $77.70/cwt. in 1998. Following this one year adjustment prices increased in 1999 to $82.63/cwt. The recovery of beef prices is projected to continue through 2003, reaching $98.41/cwt. Hog prices declined after 1996 reaching a low of $34.00/cwt. in 1999. Hog prices are projected to recover to $45.63/cwt. in 2004 and then fall to $42.95/cwt. in 2004. Annual milk prices for the 12 states, where representative dairy farms are located, are summarized in Table 2. The U.S. all milk price increased dramatically in 1998 to $15.46/cwt. but decreased to $12.33/cwt. by 2003. Milk price is projected to reach a low of $11.78/cwt. in 2002 and then climb to $12.70/cwt. by 2005.

Projected annual rates of change for variable cash expenses are presented in Table 3. The rate of change in input prices and interest rates come from FAPRI's January 2001 Baseline which relies on WEFA's macroeconomic projections. Annual interest rates paid for long- and intermediate-term loans and earned for savings are also summarized in Table 3. Assumed annual rates of change in land values over the 2000-2005 period are provided by the FAPRI Baseline and indicate a decrease in nominal land values for 2002-2005 (Table 3).

Definitions of Variables in the Summary Tables

**Overall Financial Position 2001-2005** -- As a means of summarizing the representative farms economic efficiency, liquidity, and solvency position AFPC classifies each farm as being in either a good, marginal or poor position. AFPC assumes a farm is in a good financial position when it has less than a 25 percent chance of: a cash flow deficit, externally having to refinance, and losing real net worth. If the probabilities of these events is between 25 and 50 percent the farm is classified as marginal. A probability of greater than 50 percent places the farm in a poor financial position.

**Net Income Adjustment (NIA), 2001-2005 --** NIA is the annual increase or decrease in net cash farm income necessary to insure the farm maintains its real net worth over the 2001-2005 period. A positive NIA indicates the additional annual net income needed to maintain real net worth. A negative NIA indicates the largest possible annual loss in net income the farm can endure and still maintain its real net worth over the period.

Table 1. FAPRI January 2001 Baseline Projections of Crop Prices, Loan Rates, and AMTA Payment Rates, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Crop Prices										
Corn ($/bu.)	2.71	2.43	1.94	1.82	1.87	2.05	2.10	2.14	2.18	2.24
Wheat ($/bu.)	4.30	3.38	2.65	2.48	2.67	2.88	2.91	3.03	3.11	3.17
Cotton ($/lb.)	0.6930	0.6520	0.6020	0.4490	0.5612	0.5537	0.5568	0.5613	0.5671	0.5731
Sorghum ($/bu.)	2.34	2.21	1.66	1.57	1.78	1.84	1.87	1.91	1.96	2.02
Soybeans ($/bu.)	7.35	6.47	4.93	4.63	4.75	4.53	4.56	4.69	4.89	5.06
Barley ($/bu.)	2.74	2.38	1.98	2.13	2.12	2.23	2.27	2.30	2.33	2.37
Oats ($/bu.)	1.96	1.60	1.10	1.12	1.06	1.12	1.19	1.24	1.27	1.31
Rice ($/cwt.)	9.96	9.70	8.89	6.11	5.78	6.29	6.55	6.96	7.05	7.26
Soybean Meal ($/ton)	260.40	186.60	130.60	153.10	167.60	160.70	160.10	162.10	166.10	168.90
All Hay ($/ton)	95.80	100.00	84.60	77.00	83.30	83.00	82.60	82.90	84.10	85.40
All Peanuts (cents/lb.)	28.10	28.30	28.40	25.40	25.15	26.72	25.76	25.91	25.80	25.77
Additional Peanuts (cents/lb.)	19.04	19.34	17.02	17.71	16.95	18.19	17.44	17.55	17.47	17.44
Loan Rates										
Corn ($/bu.)	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89
Wheat ($/bu.)	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58
Cotton ($/lb.)	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192	0.5192
Sorghum ($/bu.)	1.81	1.76	1.74	1.74	1.71	1.71	1.69	1.69	1.70	1.71
Soybeans ($/bu.)	4.97	5.26	5.26	5.26	5.26	5.26	5.26	5.26	5.26	5.26
Barley ($/bu.)	1.55	1.57	1.56	1.59	1.62	1.65	1.71	1.74	1.76	1.73
Oats ($/bu.)	1.03	1.11	1.11	1.13	1.16	1.21	1.14	1.10	1.11	1.10
Rice ($/cwt.)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
AMTA Payment Rates										
Corn ($/bu.)	0.2510	0.4860	0.5644	0.7260	0.6967	0.2687	0.2608	0.2608	0.2608	0.2608
Wheat ($/bu.)	0.8740	0.6310	0.9925	1.2680	1.2196	0.4717	0.4578	0.4579	0.4579	0.4579
Cotton ($/lb.)	0.0888	0.0763	0.1228	0.1572	0.1498	0.0573	0.0556	0.0556	0.0556	0.0556
Sorghum ($/bu.)	0.3230	0.5440	0.6766	0.8700	0.8349	0.3220	0.3126	0.3126	0.3126	0.3126
Barley ($/bu.)	0.3320	0.2770	0.4251	0.5420	0.5223	0.2023	0.1963	0.1964	0.1964	0.1964
Oats ($/bu.)	0.0330	0.0310	0.0464	0.0600	0.0567	0.0215	0.0208	0.0208	0.0208	0.0208
Rice ($/cwt.)	2.7660	2.7100	4.3712	5.6800	5.4372	2.1006	2.0400	2.0400	2.0400	2.0400

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia and Iowa State University.

Table 2. FAPRI January 2001 Baseline Projections of Livestock and Milk Prices, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Cattle Prices										
Feeder Cattle ($/cwt)	61.31	81.34	77.70	82.63	94.54	96.81	97.92	98.41	94.07	87.24
Fat Cattle ($/cwt)	65.05	66.32	61.48	65.56	69.65	74.49	76.00	76.64	74.16	71.94
Culled Cows ($/cwt)	30.33	34.27	36.19	38.40	41.67	45.02	46.11	46.76	45.42	42.41
Hog Prices										
Barrows/Gilts ($/cwt)	56.53	54.30	34.72	34.00	44.70	40.60	34.54	41.46	45.63	42.95
Culled Sows ($/cwt)	44.61	44.51	24.28	19.26	29.83	27.86	26.02	32.97	36.83	33.56
Milk Prices -- National and State										
All Milk Price ($/cwt)	14.75	13.36	15.46	14.38	12.33	12.56	11.78	12.39	12.59	12.70
California ($/cwt)	13.66	12.62	15.01	13.45	11.38	11.44	10.64	11.23	11.41	11.51
Florida ($/cwt)	18.00	16.50	18.20	17.20	15.56	16.18	14.89	15.48	15.71	15.81
Georgia ($/cwt)	16.30	14.70	16.60	16.00	14.36	14.85	13.76	14.37	14.59	14.70
Idaho ($/cwt)	13.90	12.30	14.50	13.00	10.65	10.93	10.19	10.82	11.03	11.15
Michigan ($/cwt)	15.00	13.60	15.30	14.80	12.90	13.34	12.34	12.95	13.17	13.29
Missouri ($/cwt)	15.10	13.70	15.60	14.70	11.70	12.19	11.10	11.71	11.93	12.04
New Mexico ($/cwt)	13.80	12.90	14.80	14.00	12.29	12.60	11.80	12.43	12.64	12.77
New York ($/cwt)	14.90	13.40	15.40	14.60	13.28	13.69	12.74	13.36	13.58	13.69
Texas ($/cwt)	15.10	13.70	15.70	15.00	13.26	13.58	12.77	13.40	13.61	13.74
Vermont ($/cwt)	15.30	14.30	16.00	15.40	13.63	13.78	12.48	13.10	13.32	13.44
Washington ($/cwt)	14.50	13.20	15.90	14.90	12.34	12.70	11.81	12.43	12.65	12.77
Wisconsin ($/cwt)	14.75	13.33	15.50	13.86	11.64	11.61	11.38	12.04	12.24	12.39

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia and Iowa State University.

Table 3. FAPRI January 2001 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 1997-2005

	1997	1998	1999	2000	2001	2002	2003	2004	2005
Annual Rate of Change for Input Prices Paid									
Seed Prices (%)	7.73	4.56	0.90	4.53	1.08	0.39	1.32	1.59	1.63
Fertilizer Prices (%)	-1.76	-10.32	-6.49	9.55	32.58	-8.09	-3.62	-0.70	0.82
Chemical Prices (%)	-2.01	1.82	3.80	3.76	-0.79	-1.34	2.17	3.05	2.92
Machinery Prices (%)	2.47	2.97	3.12	2.72	0.04	0.36	1.24	1.84	1.53
Fuel and Lube Prices (%)	0.49	-6.48	0.35	30.75	-4.09	-9.44	-1.77	-1.61	-0.88
Labor (%)	2.80	5.10	4.80	5.10	5.40	4.60	4.70	4.60	4.50
Other Input Prices (%)	9.17	2.01	1.20	2.43	-0.52	-2.89	2.63	4.02	4.95
Non-Feed Dairy Costs (%)	4.62	0.00	0.15	1.03	0.14	-0.02	0.21	0.29	0.30
Non-Feed Beef Costs (%)	1.04	-1.03	-0.52	5.92	0.81	-0.10	1.18	0.80	0.90
Non-Feed Hog Costs (%)	9.17	2.01	1.20	2.43	-0.52	-2.89	2.63	4.02	4.95
Annual Change in Consumer Price Index (%)	2.34	1.56	2.18	3.40	2.56	1.80	2.06	2.36	2.52
Annual Interest Rates									
Long-Term (%)	7.80	6.96	7.51	8.23	7.04	6.74	7.03	7.75	7.75
Intermediate-Term (%)	8.44	8.35	7.99	9.23	9.06	8.29	8.37	8.91	9.00
Savings Account (%)	4.62	4.47	4.33	5.49	5.15	4.52	4.65	5.17	5.25
Annual Rate of Change for U.S. Land Prices (%)	4.40	5.18	4.72	2.94	1.90	-2.05	-2.42	-1.16	-1.23

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia and Iowa State University.

net worth from January 1, 2001 through December 31, 2005, after adjusting for inflation. This value reflects the real annualized increase or decrease in net worth or equity for the farm over the planning horizon including changes in real estate values.

Cost to Receipts Ratio, 2001-2005 -- average ratio of total cash expenses to total receipts (from all sources). Cash expenses include interest costs, fixed cash costs, and variable costs but exclude principal payments, depreciation, income taxes, and family living expenses. Total receipts include crop and livestock receipts plus government payments and insurance indemnities.

Government Payments/Receipts, 2001-2005 – sum of all farm program payments (AMTA and marketing loan deficiency payments) divided by total receipts received from the market plus contract payments, marketing loans, crop insurance indemnities, and other farm related income.

Total Cash Receipts -- sum of cash receipts from all sources, including market sales, AMTA (or contract) payments, CCC loans, marketing loan deficiency payments, crop insurance indemnities, and other farm related income. The values in the tables are the average total receipts for each year in the planning horizon.

Net Cash Farm Income -- equals total cash receipts minus all cash expenses. Net cash farm income is used to pay family living expenses, principal payments, income taxes, self employment taxes, and machinery replacement costs. The values in the tables are the averages for each year in the planning horizon.

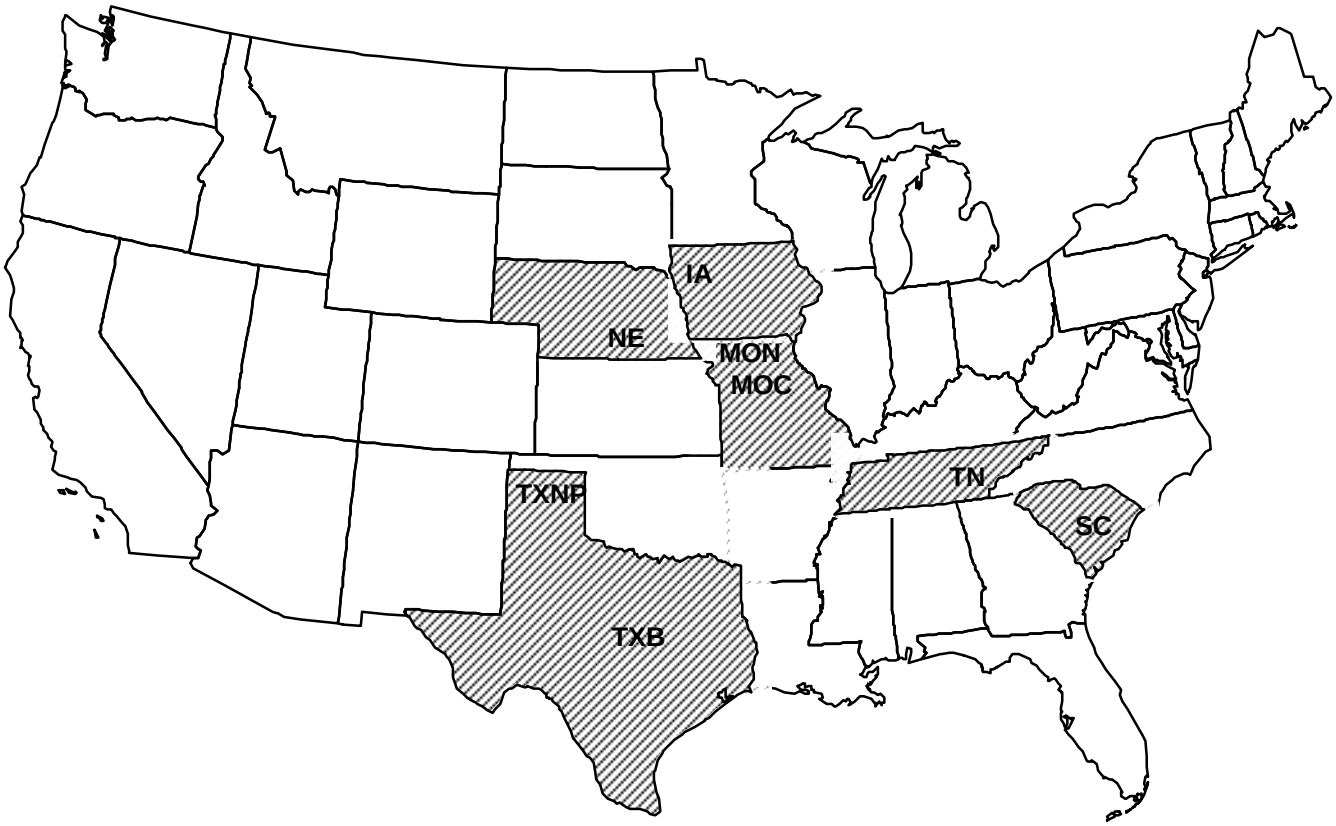
Probability of a Cash Flow Deficit -- is the number of times out of 100 that the farm's annual net cash farm income does not exceed cash requirements for family living, principal payments, taxes (income and self-employment), and actual machinery replacement expenses (not depreciation). This probability is reported for each year of the planning horizon to indicate whether the cash flow risk for a farm increases or decreases over the planning horizon.

Ending Cash Reserves -- equals total cash on hand at the end of the year. Ending cash equals beginning cash reserves plus net cash farm income and interest earned on cash reserves less principal payments, federal taxes (income and self employment), state income taxes, family living withdrawals, and actual machinery replacement costs (not depreciation).

Nominal Net Worth -- equity at the end of each year equals total assets including land minus total debt from all sources. Net worth is not adjusted for inflation and averages are reported for each year in the planning horizon.

Probability of Losing Real Net Worth -- is the number of times out of 100 that real net worth is less than the net worth for the farm at the beginning of 2001. The probability is reported for each year of the planning horizon to indicate whether the equity risk is increasing or decreasing from the base year of 2000.

FIGURE 2. REPRESENTATIVE FARMS PRODUCING FEED GRAINS AND OILSEEDS



Feedgrain and Oilseed Farm Impacts

- Persistent low corn prices projected at $2.05 - $2.24/bushel over the 2001-2005 study period continue the liquidity pressure on these farms. In addition, the 30+ percent increase in fuel and fertilizer costs in 2002 and 2001, respective, have combined to heighten the cash flow crunch that has plagued the sector since 1998.

- All fifteen feedgrain/oilseed operations are in a vulnerable liquidity position over the 2001-2005 period. The probability of a cash flow deficit in 2001 ranges from 45 percent on the large Nebraska operation (NEG1300) to 99 percent for the moderate Missouri (MONG1400), 2000 acre Texas Blacklands (TXBG2000), and Tennessee farm (TNG900). As prices increase modestly in the out years and input prices are projected to decline, six of the farms improve their liquidity position by 2005. Unfortunately the improvement is not enough to shift the farms out of the vulnerable range Tables 4-5 and Figure 3.

- The situation looks only marginally better when examining the farms capability of sustaining real wealth (Tables 4-5 and Figure 3). Two farms, NEG900 and MOCG1700 are projected to have less than a 1 in four chance of losing real equity by 2005. The large Iowa, Nebraska, Missouri and South Carolina have between a 25 and 50 percent chance of losing equity by 2005 and the remaining 9 farms all project a greater than a 1 in 2 chance that they will lose real equity without additional government assistance or infusion of outset capital.

- In the nine operations projected to lose real equity, an infusion of profits equivalent to 2 to 25 percent of gross receipts would be needed to maintain real equity. The Texas High Plains (TXNP) and Iowa (IAG) farms would sustain real equity with an increase in net income (NIA) equivalent to less than 3 percent of the current receipts. The MONG1400, TXBG2000, TXBG2500 and TNG900 would have to have to experience from 20-25 percent in profits relative to receipts with the TNG2400 and SCG1500 needing a NIA of approximately 11 percent.

- Overall, when considering both liquidity and solvency risk, AFPC classes 13 farms as extremely vulnerable, two as marginally vulnerable and none as capable of remaining economically sound. The two farms classified as marginal have the lowest cost to receipts ratio and are thus the most efficient of the 15 feedgrain farms monitored.

Table 4. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

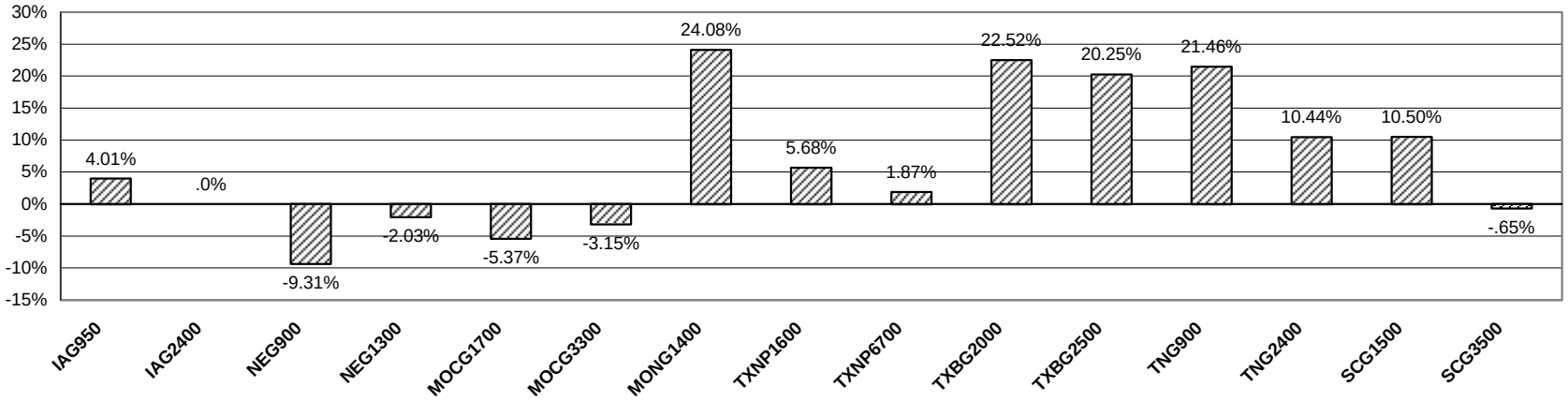
	IAG950	IAG2400	NEG900	NEG1300	MOCG1700	MOCG3300	MONG1400
Overall Financial Position							
2001-2005 Ranking	Poor	Poor	Marginal	Poor	Marginal	Poor	Poor
NIA to Maintain Real							
Net Worth ($1,000)	10.90	0.00	-30.44	-9.44	-19.47	-22.02	95.23
NIA to Maintain Real							
Net Worth (% Rec.)	4.01	0.00	-9.31	-2.03	-5.37	-3.15	24.08
Change Real Net Worth (%)							
2001-2005 Average	-0.80	-0.05	2.29	0.55	0.68	0.49	-7.43
Cost to Receipts Ratio (%)							
2001-2005 Average	79.09	82.07	66.83	71.58	68.98	72.39	111.62
Govt Payments/Receipts (%)							
2001-2005 Average	16.84	17.23	16.22	15.12	16.00	18.19	10.17
Total Cash Receipts ($1000)							
2000	282.91	624.59	343.79	482.46	362.20	718.30	386.89
2001	264.59	573.14	313.57	448.76	354.79	676.93	385.59
2002	268.99	582.65	319.79	453.89	358.92	684.10	394.46
2003	274.20	593.93	327.82	464.28	367.77	698.80	399.61
2004	278.54	603.33	333.43	475.39	368.89	701.61	401.92
2005	283.79	614.71	340.57	483.97	386.46	733.55	396.13
2001-2005 Average	274.02	593.55	327.03	465.26	367.37	699.00	395.54
Net Cash Farm Income ($1000)							
2000	82.18	176.90	131.32	172.51	126.46	259.09	10.27
2001	59.67	106.40	103.71	133.80	104.44	192.41	-14.71
2002	68.32	124.76	118.39	148.75	119.93	207.62	-7.76
2003	68.62	133.15	127.22	153.81	131.29	219.35	-12.45
2004	66.11	130.97	120.32	152.62	122.78	212.71	-30.90
2005	66.64	135.43	121.83	128.46	141.64	240.52	-52.52
2001-2005 Average	65.87	126.14	118.29	143.49	124.01	214.52	-23.67
Prob. of a Cash Flow Deficit (%)							
2001	64	64	70	45	70	71	99
2002	54	57	34	30	47	52	99
2003	59	54	39	29	53	54	99
2004	65	65	52	43	57	58	99
2005	90	58	37	99	53	56	99
Ending Cash Reserves ($1000)							
2000	90.90	221.07	224.82	333.18	345.04	498.60	-215.25
2001	84.05	199.54	215.24	338.01	337.35	456.75	-346.05
2002	81.18	182.87	239.65	368.47	344.73	442.32	-464.49
2003	72.63	171.97	262.81	394.42	356.81	427.24	-589.50
2004	56.25	132.38	272.78	406.06	358.01	400.62	-735.22
2005	14.79	124.75	289.14	291.77	372.31	397.56	-886.62
2001-2005 Average	61.78	162.30	255.92	359.75	353.84	424.90	-604.38
Nominal Net Worth ($1000)							
2000	1,044.76	1,802.74	1,077.10	1,380.92	2,193.35	3,728.59	1,475.51
2001	1,064.82	1,838.73	1,103.16	1,409.05	2,240.55	3,807.79	1,425.36
2002	1,051.22	1,811.81	1,137.32	1,414.65	2,226.80	3,774.20	1,310.35
2003	1,027.19	1,795.47	1,153.94	1,422.86	2,219.05	3,743.99	1,186.81
2004	1,013.69	1,781.71	1,175.27	1,435.32	2,222.49	3,757.60	1,058.47
2005	994.50	1,782.92	1,190.48	1,406.75	2,248.84	3,786.64	919.33
2001-2005 Average	1,030.28	1,802.13	1,152.03	1,417.73	2,231.54	3,774.04	1,180.06
Prob. of Losing Real Net Worth (%)							
2001	14	18	15	15	10	12	64
2002	31	36	12	23	13	20	86
2003	45	40	14	27	20	31	98
2004	58	47	14	25	32	39	98
2005	65	50	11	41	22	34	99

Table 5. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	TXNP1600	TXNP6700	TXBG2000	TXBG2500	TNG900	TNG2400	SCG1500	SCG3500
Overall Financial Position								
2001-2005 Ranking	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor
NIA to Maintain Real								
Net Worth ($1,000)	25.32	31.76	76.48	50.56	58.25	72.28	50.45	-9.82
NIA to Maintain Real								
Net Worth (% Rec.)	5.68	1.87	22.52	20.25	21.46	10.44	10.50	-0.65
Change Real Net Worth (%)								
2001-2005 Average	-5.54	-0.99	-20.96	-4.79	-13.56	-12.22	-4.57	0.28
Cost to Receipts Ratio (%)								
2001-2005 Average	93.67	89.60	110.29	103.84	105.20	98.18	93.48	84.79
Govt Payments/Receipts (%)								
2001-2005 Average	11.33	12.67	13.40	8.85	12.61	15.03	14.01	9.24
Total Cash Receipts ($1000)								
2000	428.58	1,737.80	309.49	307.06	278.17	704.82	490.23	1,550.48
2001	421.60	1,637.24	329.70	299.93	270.25	665.16	461.52	1,450.17
2002	438.33	1,664.95	330.58	300.71	271.86	675.66	470.64	1,468.06
2003	446.51	1,706.68	339.16	308.92	279.15	690.86	478.59	1,512.11
2004	454.90	1,749.94	344.77	263.11	283.20	701.56	490.46	1,539.44
2005	469.12	1,790.65	354.07	319.06	288.02	728.65	501.63	1,563.02
2001-2005 Average	446.09	1,709.89	339.66	298.35	278.49	692.38	480.57	1,506.56
Net Cash Farm Income ($1000)								
2000	58.16	283.15	-10.60	29.58	23.95	111.00	85.89	380.19
2001	35.35	121.84	-19.09	2.88	2.71	14.77	38.08	213.39
2002	62.09	204.64	-12.50	7.90	2.27	35.61	52.14	264.82
2003	62.34	238.25	-11.53	13.45	-1.54	46.74	49.63	296.16
2004	64.45	254.26	-25.48	8.47	-8.73	33.19	48.91	302.04
2005	68.50	261.49	-40.75	5.21	-19.83	40.93	49.61	301.76
2001-2005 Average	58.54	216.10	-21.87	7.58	-5.02	34.25	47.67	275.64
Prob. of a Cash Flow Deficit (%)								
2001	71	84	99	83	99	97	71	63
2002	58	66	99	63	99	91	72	46
2003	64	60	99	70	99	92	78	51
2004	67	55	99	83	99	95	84	58
2005	79	62	99	82	99	97	93	52
Ending Cash Reserves ($1000)								
2000	103.88	651.46	-95.81	194.13	-88.16	214.59	34.54	453.66
2001	57.44	504.94	-178.30	143.55	-144.12	59.47	-8.08	363.37
2002	39.61	452.36	-245.57	107.52	-199.01	-73.17	-29.03	364.59
2003	5.58	410.55	-300.38	71.98	-276.50	-185.28	-61.83	372.40
2004	-32.30	376.74	-399.21	21.78	-367.17	-321.99	-99.84	380.73
2005	-73.74	339.87	-511.98	-33.61	-486.64	-439.58	-142.96	374.75
2001-2005 Average	-0.68	416.89	-327.09	62.24	-294.69	-192.11	-68.35	371.17
Nominal Net Worth ($1000)								
2000	433.92	2,480.58	392.09	1,039.15	503.22	698.42	914.47	3,275.69
2001	398.34	2,430.27	324.26	1,009.44	465.91	591.57	909.05	3,325.50
2002	375.15	2,389.37	252.65	955.33	403.72	489.45	861.43	3,331.32
2003	347.87	2,359.51	195.30	900.38	332.78	428.78	800.10	3,297.01
2004	327.02	2,365.32	99.46	844.73	256.30	339.03	750.85	3,294.26
2005	311.19	2,338.45	-18.62	783.44	160.70	269.49	699.72	3,293.33
2001-2005 Average	351.91	2,376.58	170.61	898.67	323.88	423.66	804.23	3,308.28
Prob. of Losing Real Net Worth (%)								
2001	61	54	90	65	75	84	46	27
2002	64	53	96	73	92	88	67	35
2003	63	57	98	87	96	92	81	37
2004	63	59	99	94	97	91	87	38
2005	61	56	99	99	99	92	90	44

Figure 3. Feed Grain and Oilseed Farms

Minimum Annual Percentage Change in Receipts, 2001-2005, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2001-2005, for all Feed Grain and Oilseed Farms

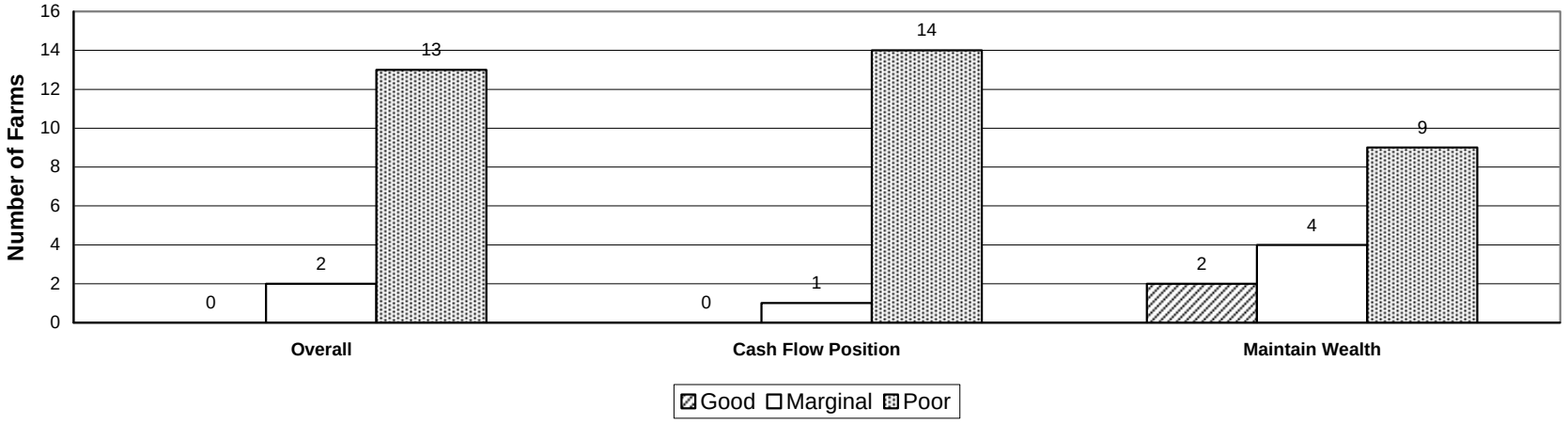


Figure 4. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

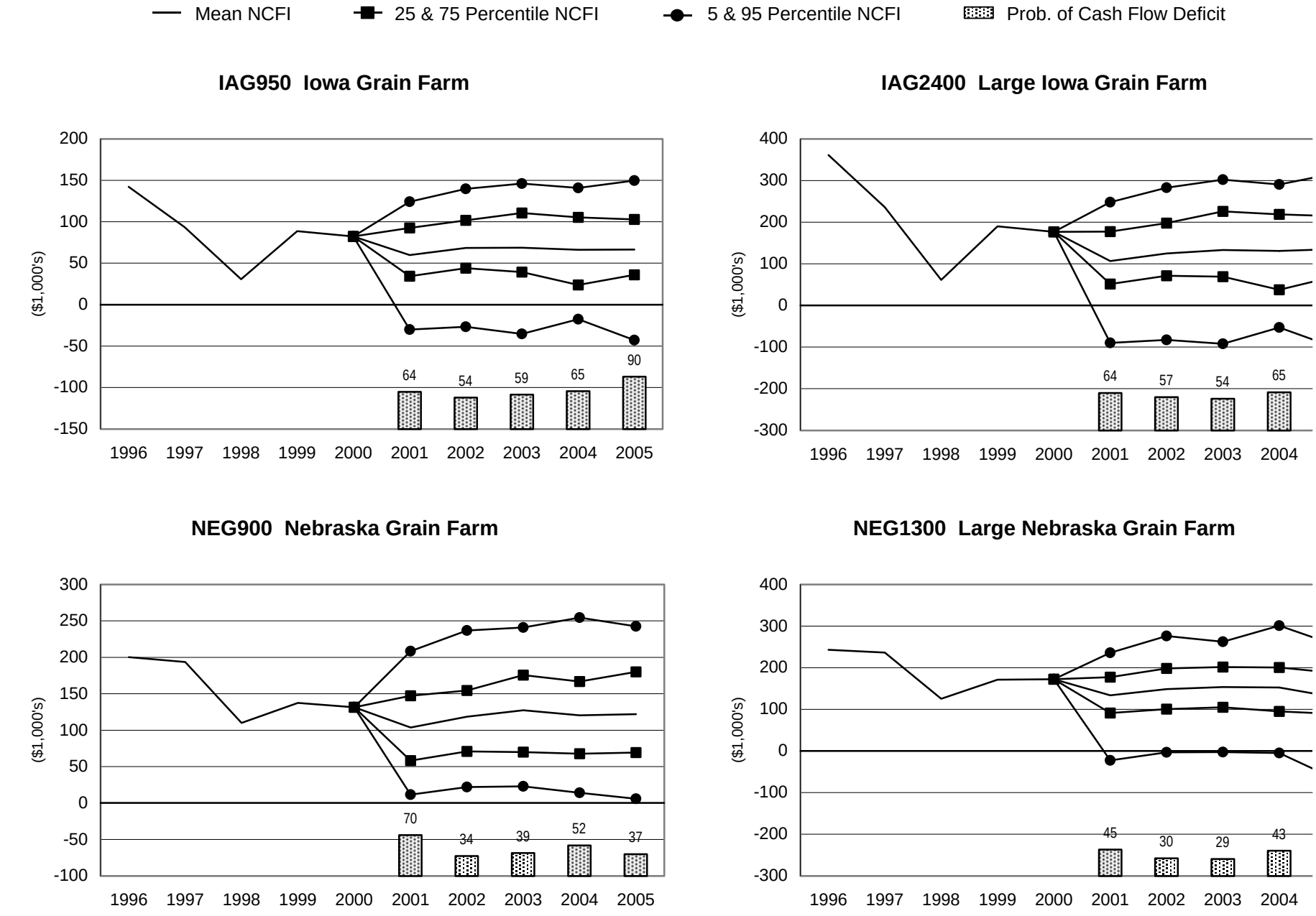


Figure 5. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

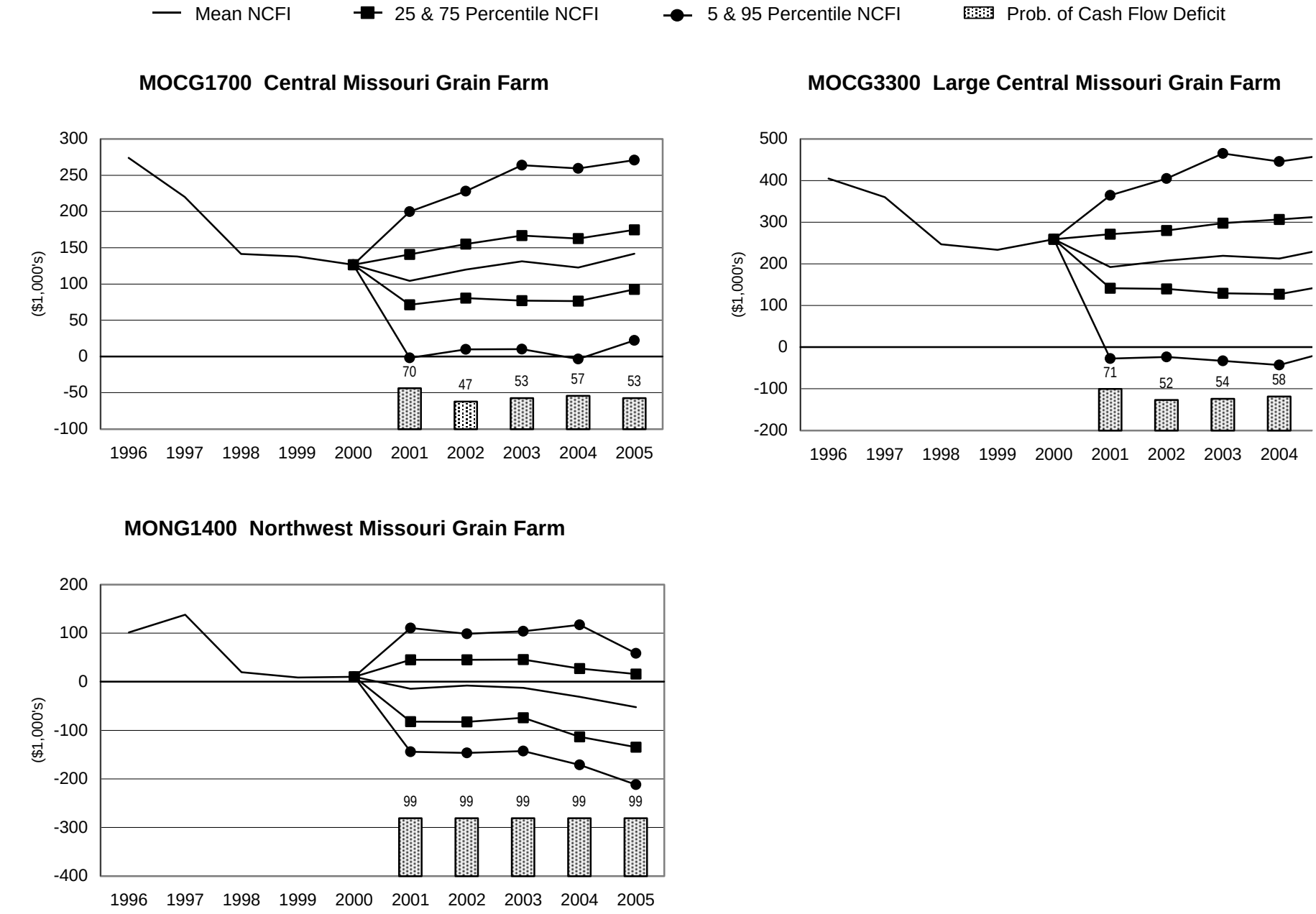


Figure 6. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

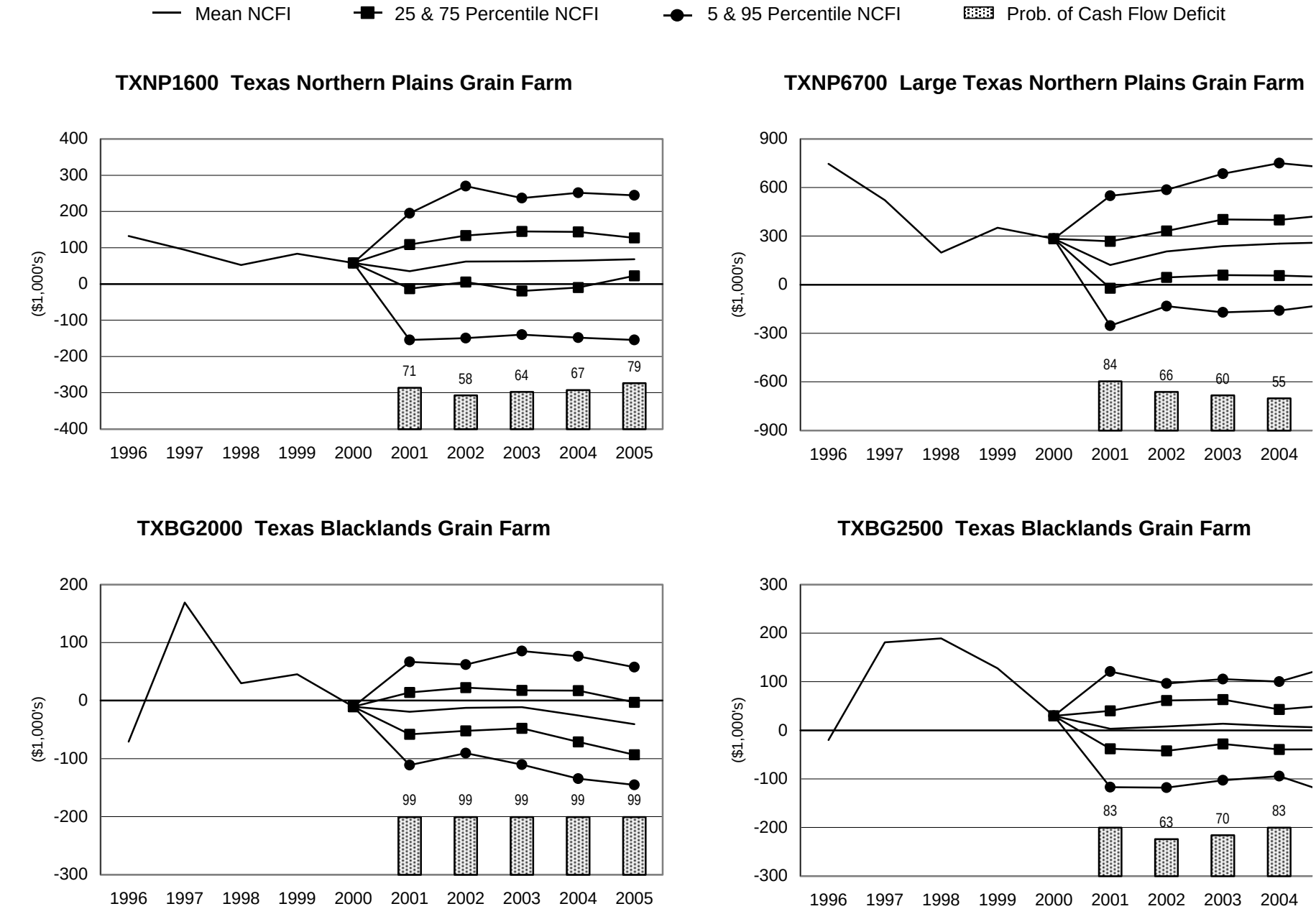


Figure 7. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

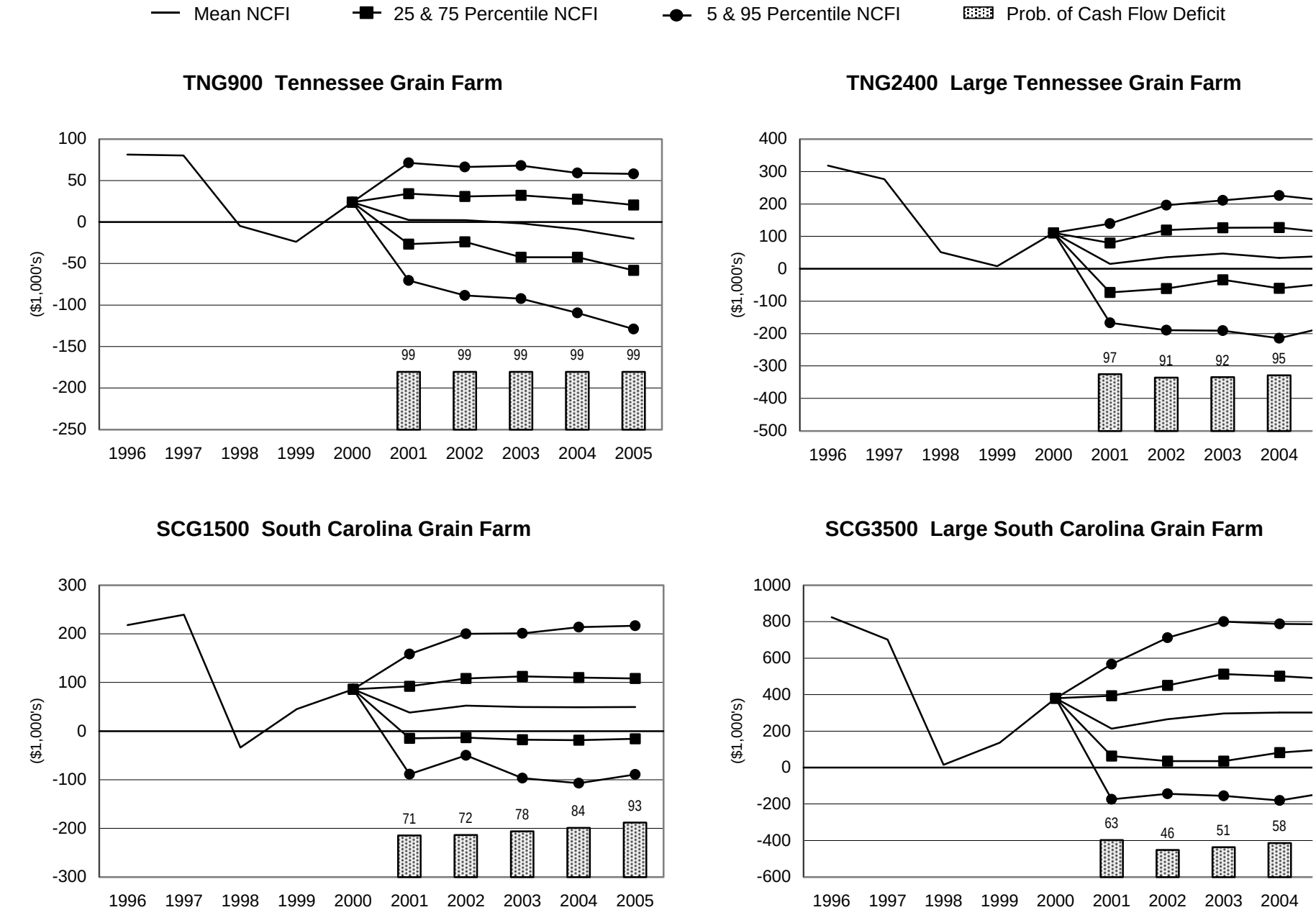
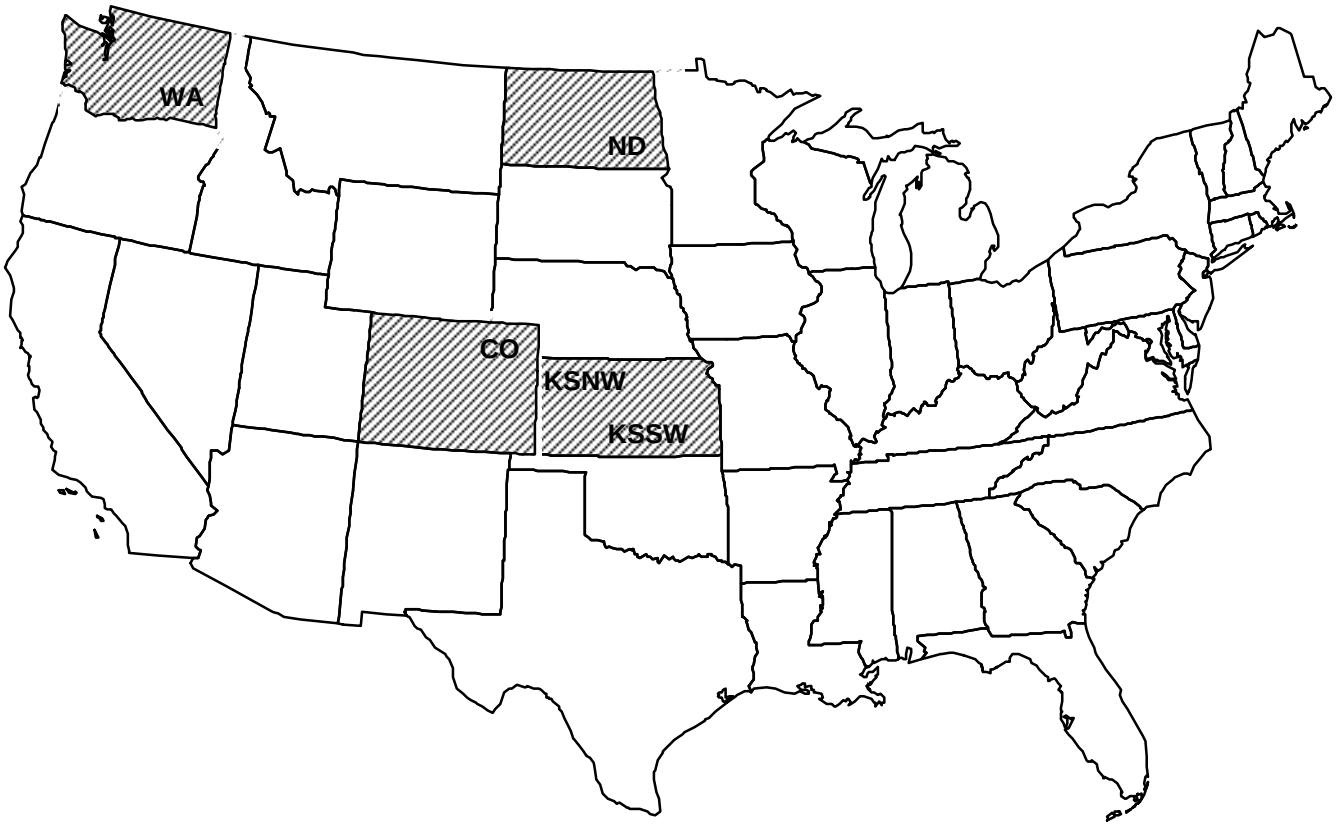


FIGURE 8. REPRESENTATIVE FARMS PRODUCING WHEAT



Wheat Farm Impacts

- Wheat prices are projected to increase modestly from the $2.88/bushel price forecast for the 2001 to $3.17/bushel in 2005. Couple these modest wheat prices with the increase in fuel and fertilizer costs projected for the period and the liquidity position of the farms are questionable.

- Only the two Colorado operations appear capable of handling the liquidity pressure over the 2001-2005 study period. Two factors contribute to the favorable liquidity position of the Colorado operations relative to the other wheat farms. First, the two farms are the most efficient of the ten farms monitored when measuring costs to receipts. Both farms cost to receipts ratio average approximately 60 cents on the dollar over the 2001-2005 period (Table 6). Second, the 1999 crop was very profitable for this region relative to the other wheat producing areas. Both farms net cash farm income was in the upper 20 percent of their probability range (Figure 9) reflecting the fact that the farm achieved above average yields, in addition to, the market loss assistance payments. Therefore, the efficiency of the farms plus the cash reserves available at the beginning of 2001, buffered the increase in input cost and allowed the farm to improve its liquidity position over time. Consequently, the farms have a negligible probability of losing real net worth throughout the period (Table 6 and Figure 9).

- The remaining eight wheat farms are facing substantial liquidity problems. The probability of a cash flow deficit on six of the farms in 2003 exceed 50 percent with many in the 80-97 percent range.

- From a solvency perspective the story is about the same. Seven of the eight farms are in a vulnerable position when measuring their probability of maintaining real net worth throughout the period. The large south central Kansas operation (KSSW3180) appears to be in good shape from a solvency perspective reflecting its cautionary liquidity position, relative efficiency, and cash reserves.

- A 3-17 percent increase in net cash income relative to total receipts would be needed to allow the six farms with declining net worth to maintain the status quo. The two Colorado operations, and the KSSW3180 operation are in good shape from a solvency position.

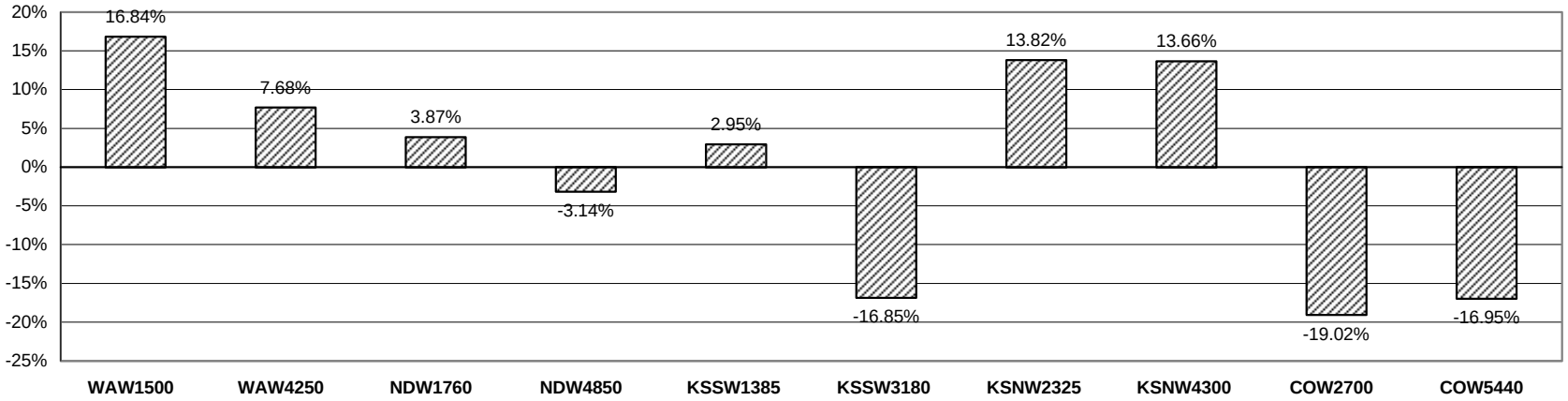
- Overall, two farms appear capable of sustaining economic viability without additional assistance. These include the two Colorado farms (Figure 9). The large North Dakota farm and the large Southwest Kansas farm are cautiously vulnerable and the remaining six operations will likely need additional assistance over the period to remain viable.

Table 6. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat.

	WAW1500	WAW4250	NDW1760	NDW4850	KSSW1385	KSSW3180	KSNW2325	KSNW4300	COW2700	COW5440
Overall Financial Position										
2001-2005 Ranking	Poor	Poor	Poor	Marginal	Poor	Marginal	Poor	Poor	Good	Good
NIA to Maintain Real										
Net Worth ($1,000)	58.95	70.95	9.36	-23.74	4.17	-63.84	28.49	65.00	-41.94	-82.71
NIA to Maintain Real										
Net Worth (% Rec.)	16.84	7.68	3.87	-3.14	2.95	-16.85	13.82	13.66	-19.02	-16.95
Change Real Net Worth (%)										
2001-2005 Average	-4.99	-1.59	-2.07	1.00	-0.69	3.64	-7.15	-8.19	4.54	2.99
Cost to Receipts Ratio (%)										
2001-2005 Average	96.55	88.00	82.08	76.22	65.32	61.72	92.47	95.64	60.35	58.99
Govt Payments/Receipts (%)										
2001-2005 Average	9.90	10.11	13.27	14.91	19.24	14.43	12.83	12.26	15.25	15.84
Total Cash Receipts ($1000)										
2000	351.12	937.42	253.53	778.36	157.82	406.20	227.75	490.14	182.56	416.73
2001	337.65	892.03	231.88	729.55	137.62	371.23	214.86	462.01	225.57	481.56
2002	342.31	903.83	235.70	740.47	137.46	370.02	220.58	472.27	220.56	474.93
2003	350.60	920.57	241.50	754.30	140.90	378.82	222.18	474.57	225.40	488.69
2004	357.03	942.36	245.79	779.25	142.82	384.09	228.79	484.29	228.11	492.61
2005	363.24	958.31	253.76	796.09	146.16	390.09	234.37	493.08	232.98	501.43
2001-2005 Average	350.17	923.42	241.73	759.93	140.99	378.85	224.15	477.24	226.52	487.85
Net Cash Farm Income ($1000)										
2000	45.04	187.64	72.86	239.74	70.96	191.60	42.09	73.00	51.02	144.35
2001	13.56	114.13	45.66	176.14	47.67	143.62	24.89	30.25	85.96	189.93
2002	25.08	145.63	53.85	198.12	50.24	150.19	35.11	47.39	88.42	196.49
2003	29.51	145.74	52.68	204.30	54.50	159.04	30.05	41.82	95.53	213.15
2004	25.09	143.55	52.78	219.93	55.91	159.88	30.06	39.33	98.26	215.05
2005	22.36	140.11	52.80	234.01	53.86	155.23	28.51	25.11	98.29	216.70
2001-2005 Average	23.12	137.83	51.55	206.50	52.43	153.59	29.72	36.78	93.29	206.27
Prob. of a Cash Flow Deficit (%)										
2001	99	86	67	61	79	42	93	90	14	24
2002	98	83	51	41	78	12	85	76	20	11
2003	99	84	59	39	80	18	94	82	15	11
2004	98	87	50	36	63	22	92	83	13	5
2005	97	81	58	41	81	49	94	97	10	10
Ending Cash Reserves ($1000)										
2000	-61.48	196.06	60.94	321.66	88.00	450.09	70.50	154.38	92.67	209.93
2001	-146.34	78.14	47.88	296.54	75.87	478.81	19.08	86.73	112.30	239.22
2002	-213.59	-9.58	50.94	323.96	68.22	539.54	-14.53	46.42	135.50	298.07
2003	-266.43	-84.47	43.01	358.53	57.00	605.68	-60.87	-7.18	162.28	366.87
2004	-317.49	-156.18	42.40	392.12	56.88	667.55	-93.85	-67.62	193.95	444.87
2005	-367.93	-222.44	38.00	427.44	37.32	710.12	-133.99	-163.27	225.90	519.75
2001-2005 Average	-262.36	-78.90	44.45	359.72	59.06	600.34	-56.83	-20.99	165.99	373.76
Nominal Net Worth ($1000)										
2000	1,168.94	3,755.07	353.87	1,904.05	469.65	1,250.19	376.36	688.06	661.38	2,016.81
2001	1,120.18	3,757.07	344.50	1,945.86	470.80	1,293.40	349.19	641.82	706.93	2,104.05
2002	1,044.71	3,654.56	336.23	1,952.15	460.61	1,339.94	322.24	597.26	719.52	2,143.36
2003	984.12	3,568.16	330.59	1,947.08	448.89	1,383.44	291.73	544.60	736.55	2,176.30
2004	937.56	3,518.19	323.84	1,960.54	454.36	1,430.97	274.06	483.79	766.13	2,238.75
2005	869.67	3,427.83	314.51	1,982.60	449.67	1,465.14	239.81	402.80	804.50	2,298.34
2001-2005 Average	991.25	3,585.16	329.93	1,957.65	456.86	1,382.58	295.41	534.05	746.73	2,192.16
Prob. of Losing Real Net Worth (%)										
2001	84	35	55	24	32	10	73	74	1	1
2002	88	55	60	27	53	2	77	81	1	1
2003	91	71	62	31	72	2	84	91	1	1
2004	93	81	60	33	62	1	86	93	1	1
2005	94	83	60	28	58	1	85	97	1	1

Figure 9. Wheat Farms

Minimum Annual Percentage Change in Receipts, 2001-2005, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2001-2005, for all Wheat Farms

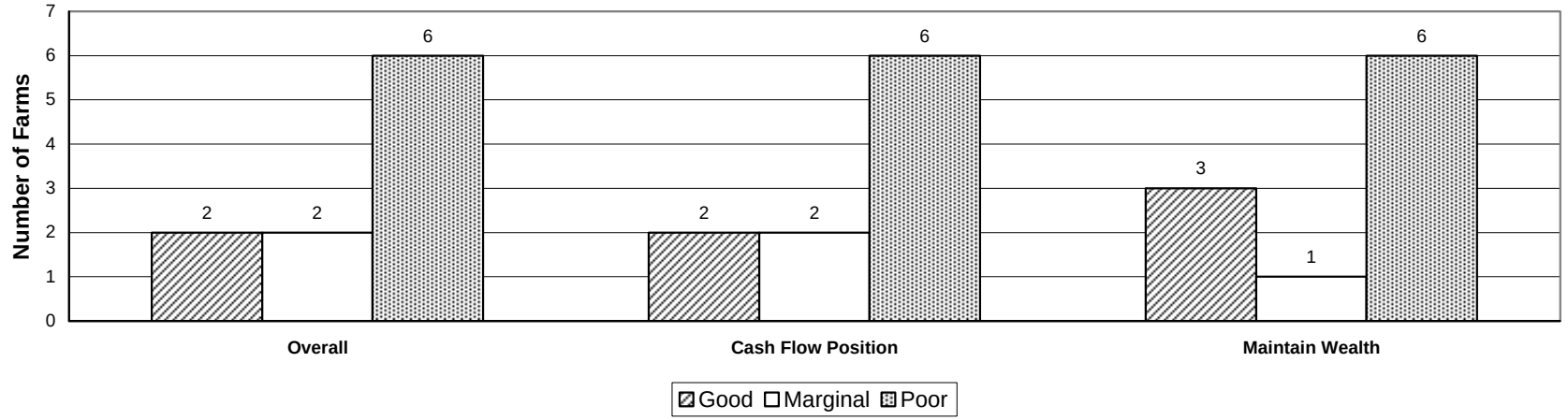


Figure 10. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

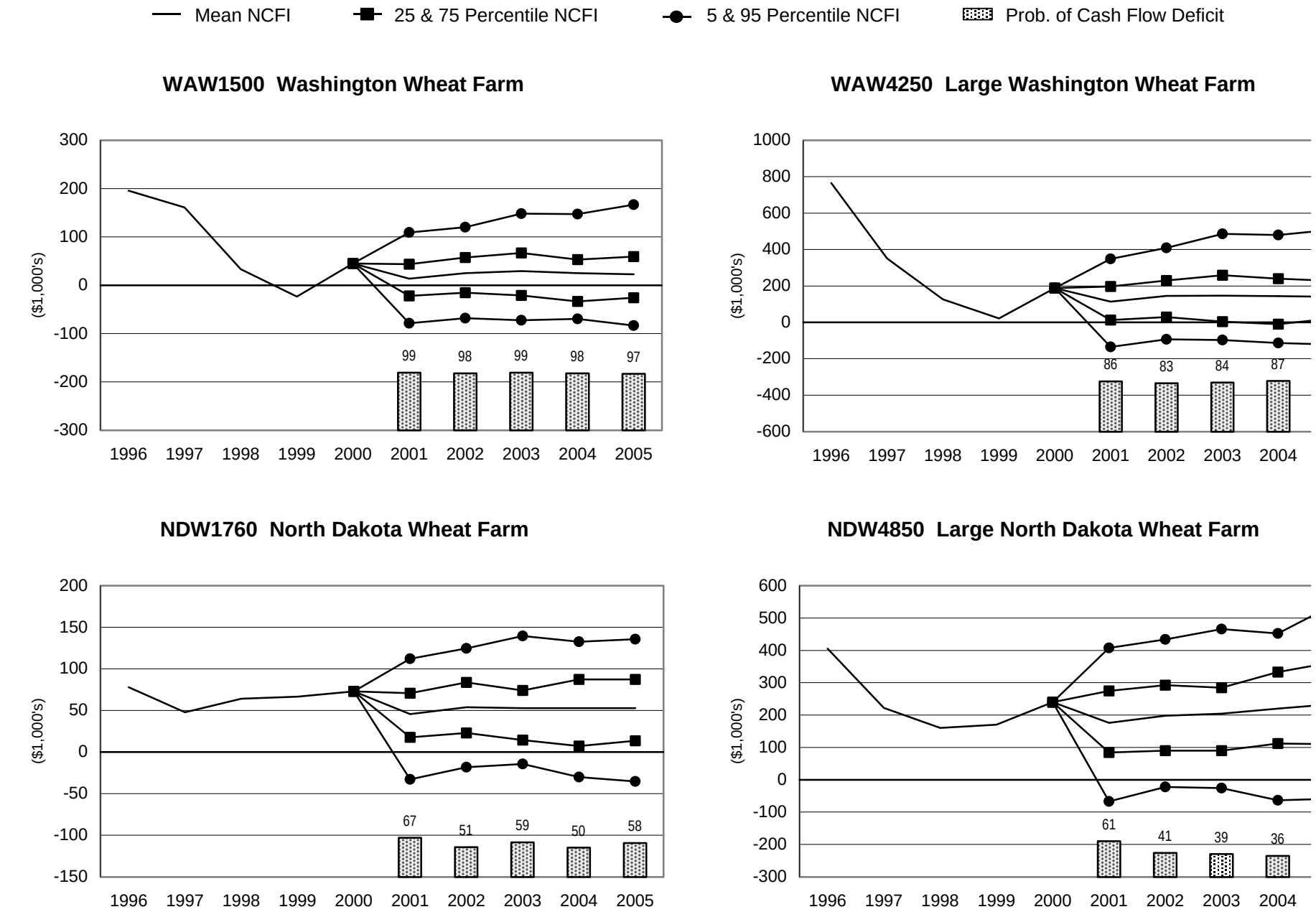


Figure 11. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

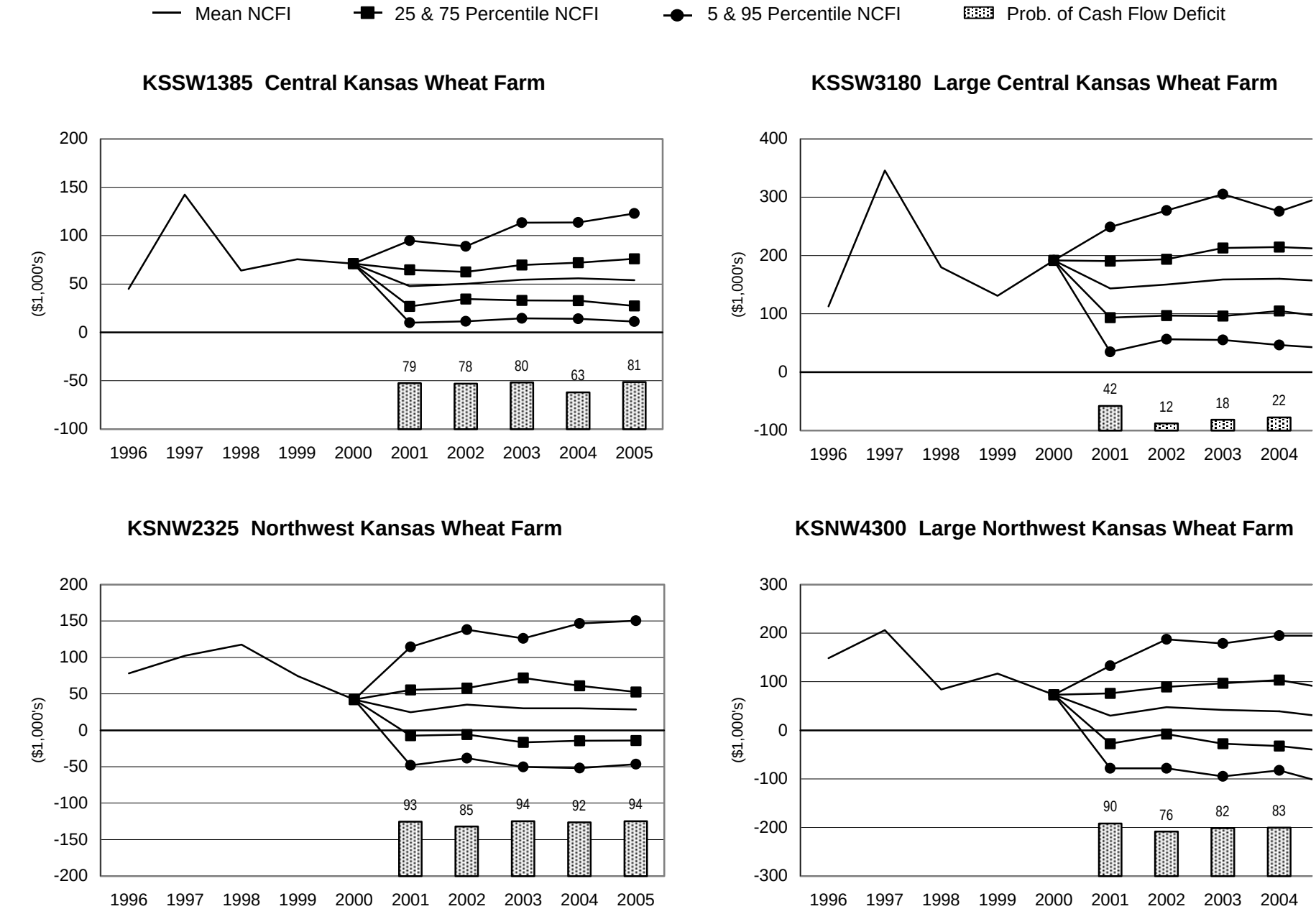


Figure 12. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

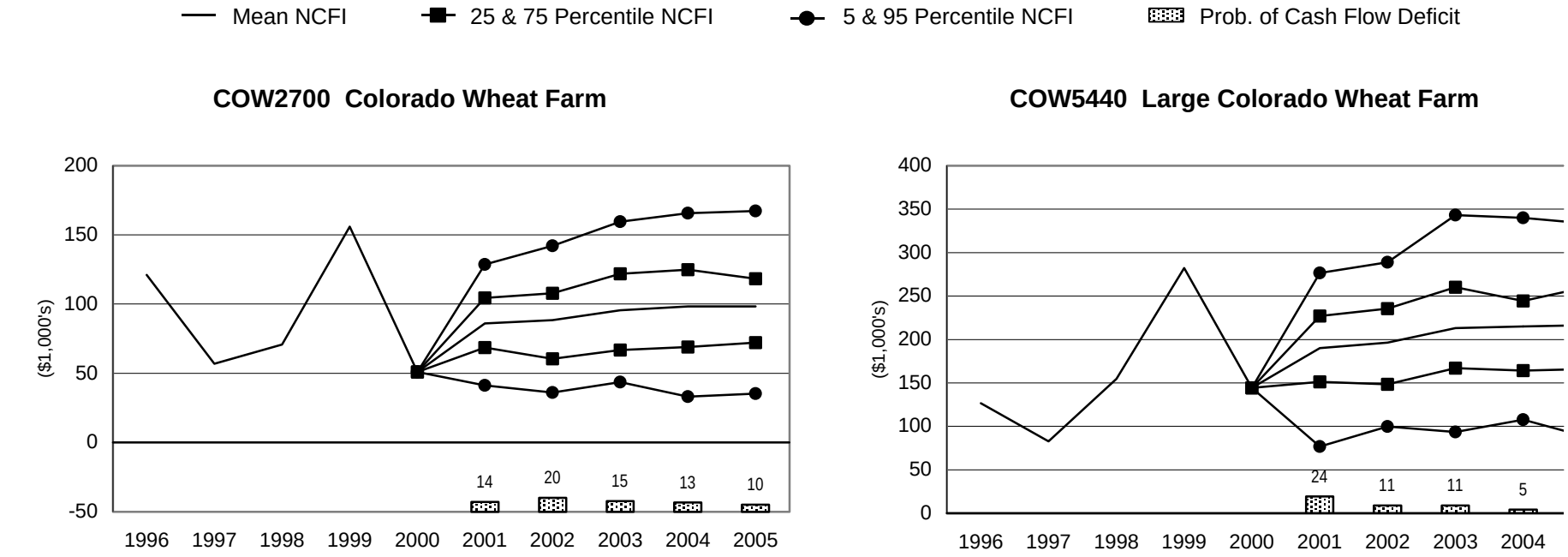
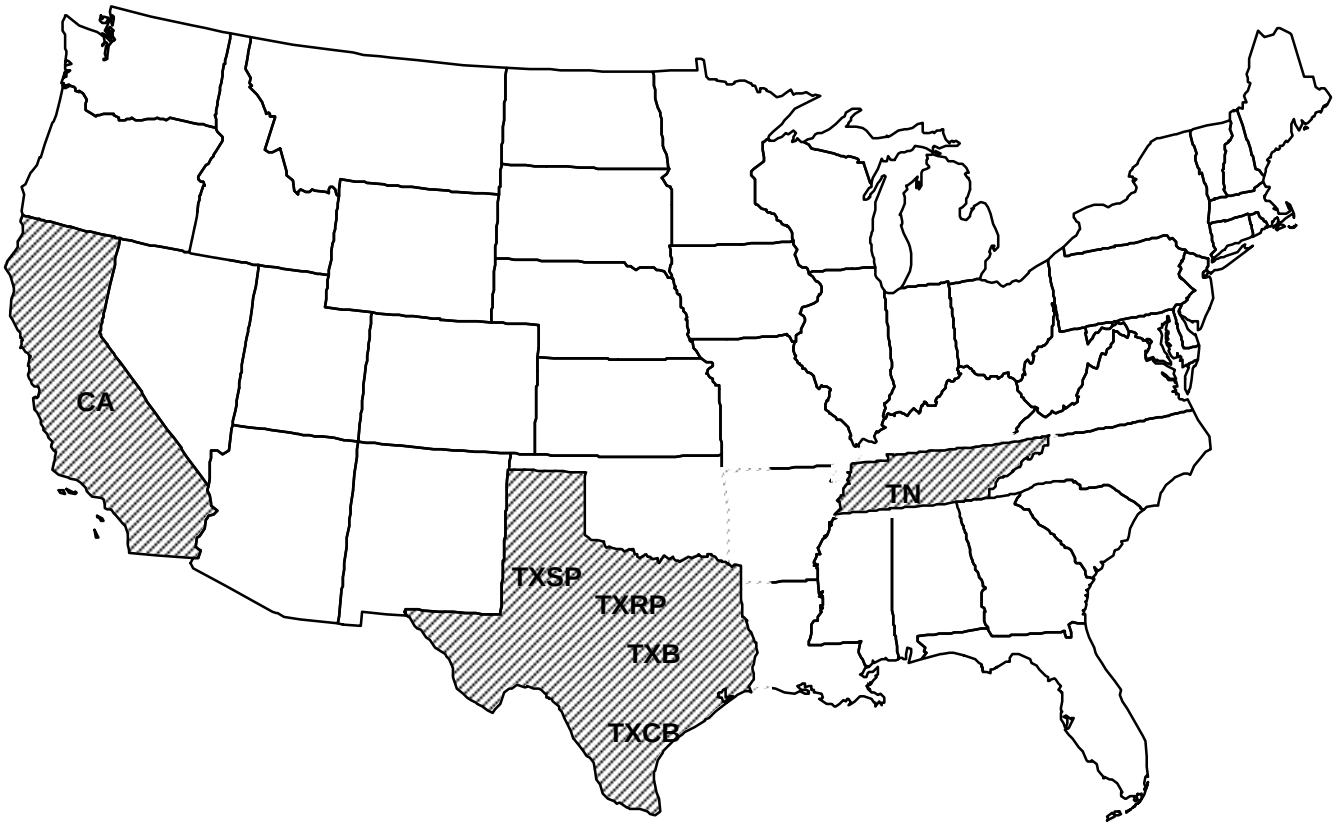


FIGURE 13. REPRESENTATIVE FARMS PRODUCING COTTON



Cotton Farm Impacts

- Increased fuel and fertilizer cost and only marginal increases in cotton prices combine to point a cash flow crisis for the nine cotton farms monitored by AFPC.

- Eight of the nine farms have a probability of cash flow deficit (PCFD) that exceeds 60 percent by 2005. The Texas Coastal Bend operation TXCB1720 with a PCFD of approximately 47 percent falls in the extremely cautious range (Table 7).

- The heavy liquidity pressure also improves the farms ability to sustain real net worth. Only the large Texas Southern Plains cotton farm (TXSP3697) has a probability of a decline in net worth below 25 percent (21%) in 2005 although the TXCB1720 is close at 26 percent. The remaining seven operations experience a probability of declining net worth by 2005 that exceed 60 percent.

- Increases in net income relative to receipts of 16 percent would be required to sustain real net worth for both California, the Texas Rolling Plains and the Tennessee operation.

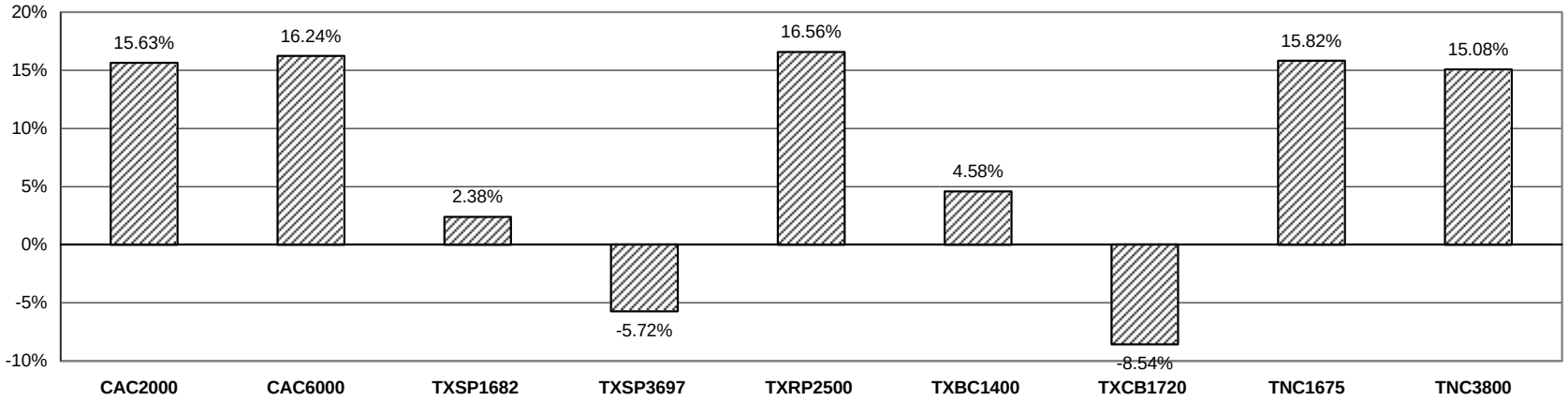
- Overall, AFPC ranks 7 of the nine cotton farms as extremely vulnerable over the period (Figure 14). The remaining two farms are rated marginal without additional government assistance.

Table 7. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

	CAC2000	CAC6000	TXSP1682	TXSP3697	TXRP2500	TXBC1400	TXCB1720	TNC1675	TNC3800
Overall Financial Position									
2001-2005 Ranking	Poor	Poor	Poor	Marginal	Poor	Poor	Marginal	Poor	Poor
NIA to Maintain Real									
Net Worth ($1,000)	223.02	1,240.87	12.09	-59.26	38.85	10.93	-27.61	88.38	205.68
NIA to Maintain Real									
Net Worth (% Rec.)	15.63	16.24	2.38	-5.72	16.56	4.58	-8.54	15.82	15.08
Change Real Net Worth (%)									
2001-2005 Average	-6.05	-10.57	-3.49	4.32	-18.66	-1.82	3.01	-14.29	-2.68
Cost to Receipts Ratio (%)									
2001-2005 Average	105.88	117.39	89.09	81.71	105.52	80.76	85.68	106.52	108.44
Govt Payments/Receipts (%)									
2001-2005 Average	7.90	2.80	5.98	8.31	14.78	11.97	16.14	12.16	10.74
Total Cash Receipts ($1000)									
2000	1,510.94	7,712.10	410.49	630.31	246.17	252.83	344.92	581.72	1,355.61
2001	1,391.55	7,463.41	519.10	1,081.35	225.94	232.67	308.13	533.57	1,313.98
2002	1,402.51	7,451.20	507.85	1,004.26	232.68	236.23	313.09	545.49	1,335.57
2003	1,420.62	7,551.78	513.76	1,020.34	234.51	240.69	323.54	558.77	1,365.01
2004	1,450.85	7,755.24	519.87	1,034.95	241.74	245.77	337.18	573.16	1,419.96
2005	1,468.12	7,983.15	526.24	1,040.77	238.02	246.91	333.94	582.49	1,421.59
2001-2005 Average	1,426.73	7,640.96	517.37	1,036.34	234.58	240.45	323.18	558.70	1,371.22
Net Cash Farm Income ($1000)									
2000	70.56	-501.26	12.11	-45.27	31.68	72.57	95.16	47.36	108.86
2001	-88.83	-881.17	69.05	258.53	20.13	45.19	74.85	-42.52	-16.01
2002	-34.59	-822.88	70.54	210.65	27.37	56.40	92.51	-28.02	12.13
2003	-35.78	-917.40	74.31	219.72	19.63	60.46	99.29	1.44	94.89
2004	-42.34	-1,017.80	64.56	214.11	12.62	50.67	109.90	-4.69	96.69
2005	-75.85	-1,073.63	61.08	211.70	-2.21	41.23	107.38	-16.12	59.19
2001-2005 Average	-55.48	-942.57	67.91	222.94	15.51	50.79	96.79	-17.98	49.38
Prob. of a Cash Flow Deficit (%)									
2001	98	87	99	56	95	71	52	99	84
2002	92	92	99	55	91	29	43	99	87
2003	97	92	99	58	92	36	40	99	86
2004	95	90	99	69	95	70	44	99	88
2005	98	93	97	60	99	74	47	99	89
Ending Cash Reserves ($1000)									
2000	258.34	-562.14	-201.93	-85.73	-84.73	61.30	97.68	-156.61	-98.06
2001	-30.39	-1,801.12	-225.88	-40.21	-114.52	50.77	100.56	-293.22	-362.60
2002	-219.19	-2,933.33	-237.98	-4.48	-128.67	61.04	139.74	-399.83	-543.85
2003	-426.44	-4,192.28	-257.18	19.07	-157.57	73.46	174.86	-490.89	-661.88
2004	-638.94	-5,550.87	-293.41	47.15	-212.14	57.04	212.94	-596.28	-807.10
2005	-940.41	-6,978.26	-322.38	73.11	-288.68	33.86	242.73	-715.50	-1,043.34
2001-2005 Average	-451.07	-4,291.17	-267.37	18.93	-180.32	55.23	174.17	-499.14	-683.75
Nominal Net Worth ($1000)									
2000	3,455.35	12,179.98	360.90	1,242.62	213.49	507.64	857.88	709.62	7,590.80
2001	3,296.28	11,322.78	362.70	1,359.52	188.07	505.96	874.45	608.25	7,528.78
2002	3,082.02	10,009.17	351.18	1,408.33	163.32	501.90	893.75	488.37	7,225.61
2003	2,845.93	8,530.33	332.90	1,423.99	125.77	499.84	911.17	393.69	6,961.41
2004	2,649.67	7,144.60	307.73	1,467.47	79.37	486.56	946.54	299.52	6,771.17
2005	2,389.95	5,694.66	295.34	1,498.51	14.22	457.58	978.74	200.79	6,518.20
2001-2005 Average	2,852.77	8,540.31	329.97	1,431.56	114.15	490.37	920.93	398.12	7,001.03
Prob. of Losing Real Net Worth (%)									
2001	79	76	47	22	68	50	48	89	48
2002	91	78	49	18	72	51	35	97	62
2003	97	80	52	23	75	49	33	94	75
2004	97	85	64	23	83	62	26	96	80
2005	99	85	64	21	81	76	26	96	85

Figure 14. Cotton Farms

Minimum Annual Percentage Change in Receipts, 2001-2005, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2001-2005, for all Cotton Farms

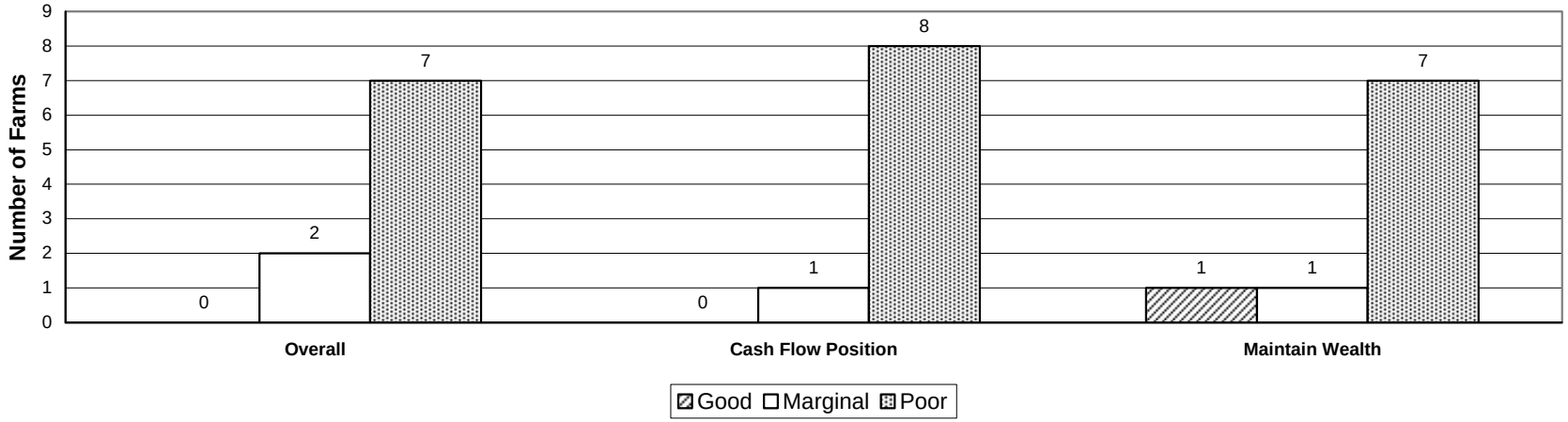


Figure 15. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

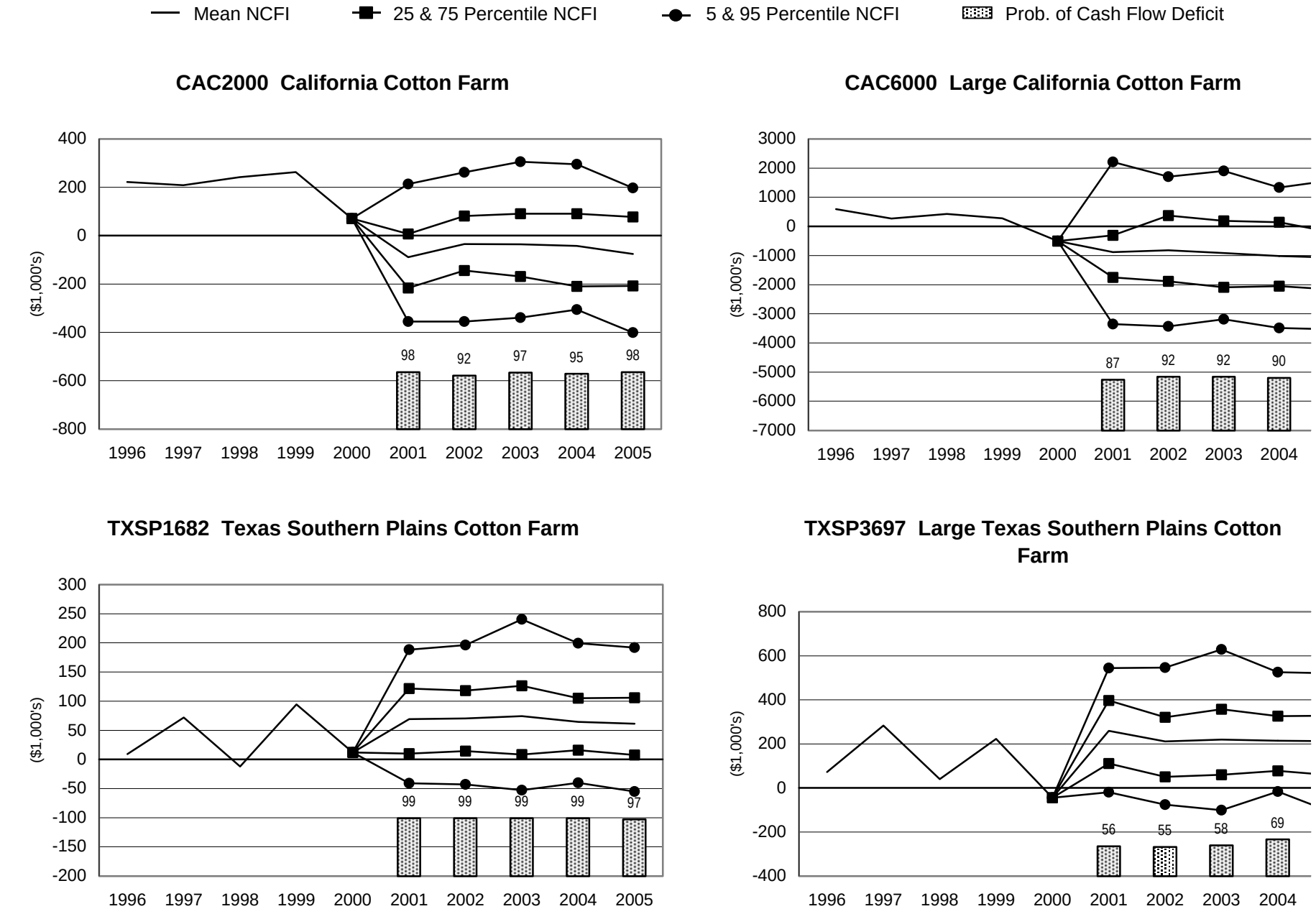


Figure 16. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

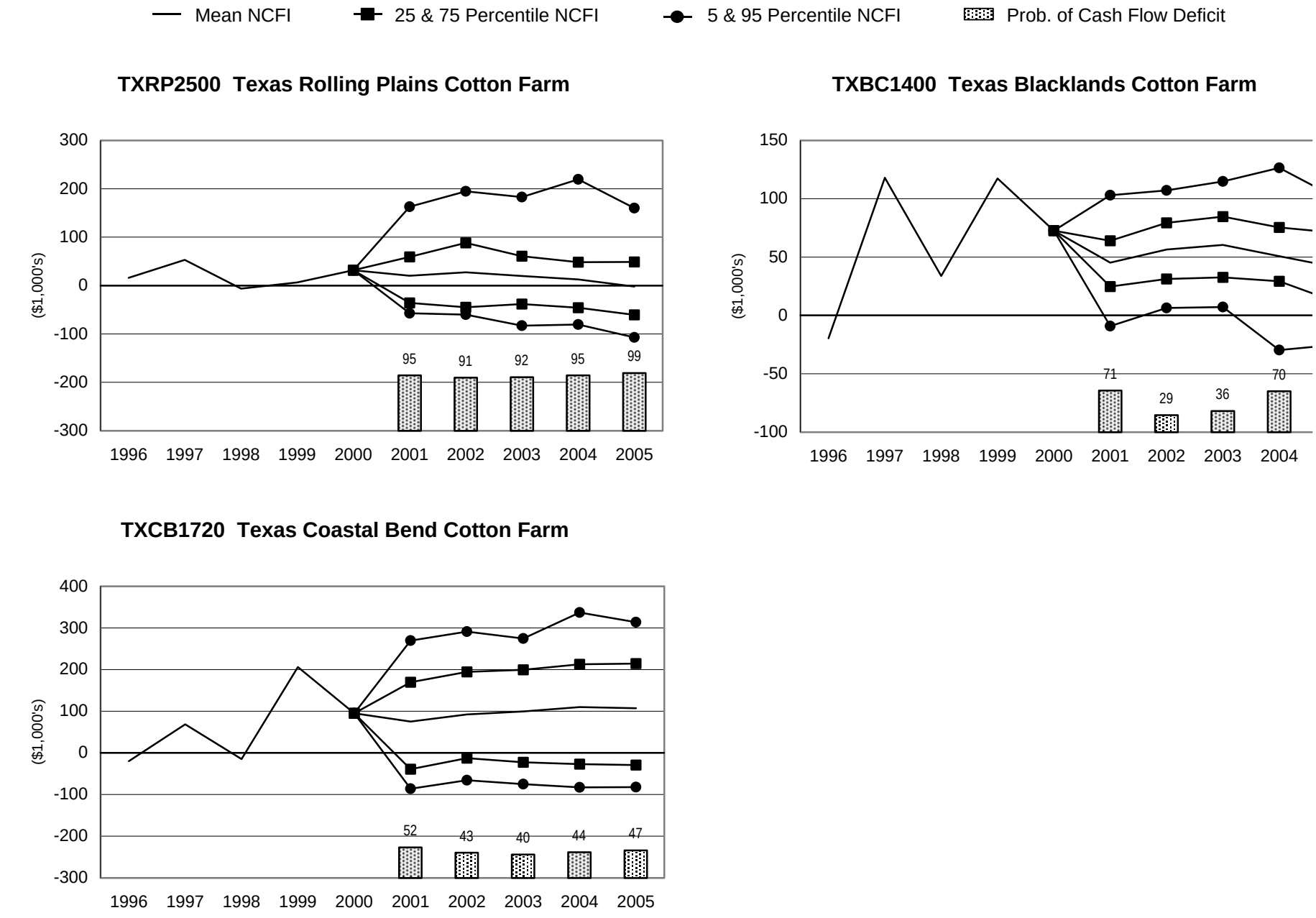


Figure 17. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

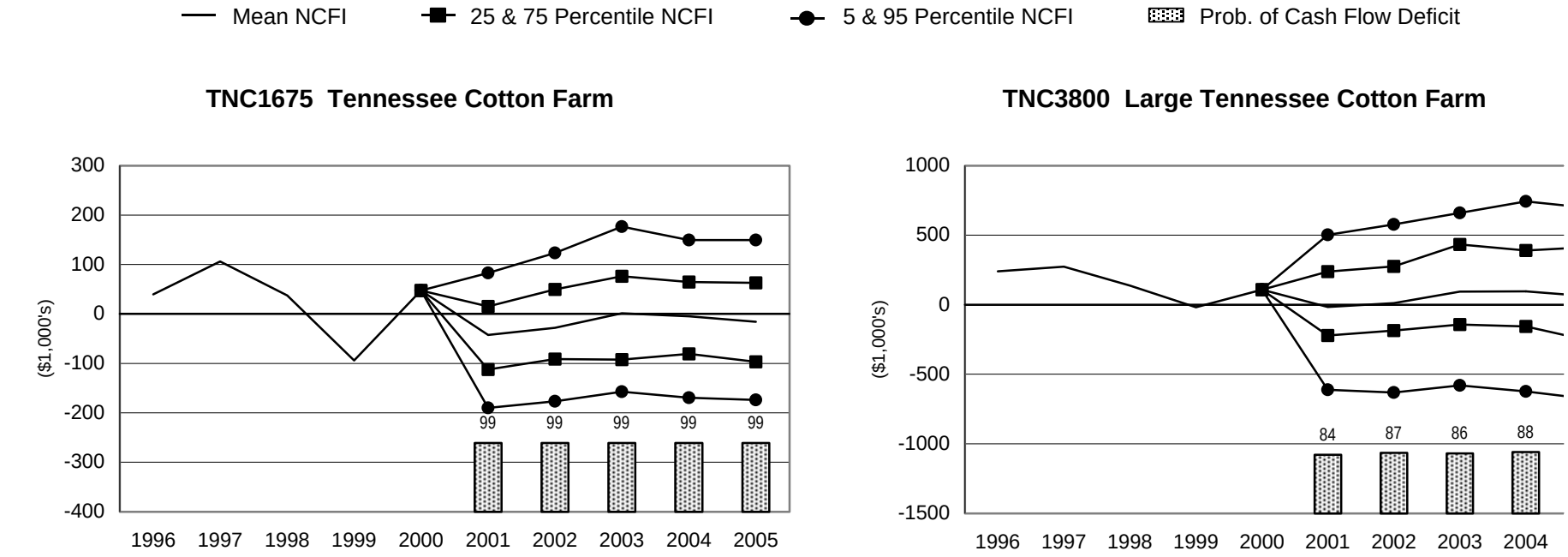
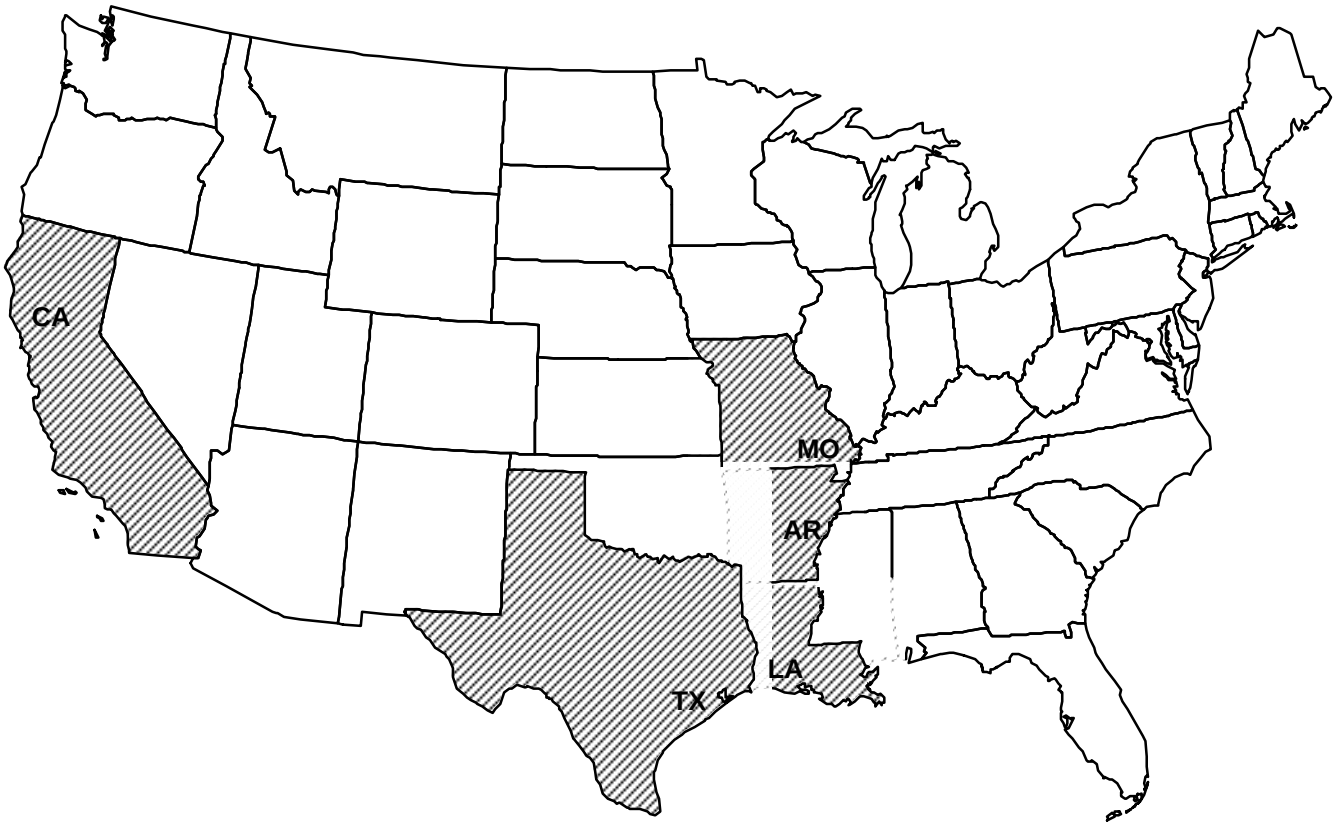


FIGURE 18. REPRESENTATIVE FARMS PRODUCING RICE



Rice Farm Impacts

- As with the other crops, a combination of relatively low prices and increased input cost spell liquidity problems for the eight rice farms monitored by AFPC.

- All farms are in an extremely vulnerable liquidity position without additional assistance. By 2005, all rice farms have a greater than 1 in 2 chance of not being able to cover cash expenses (Table 8).

- The two Missouri Boothill farms and the Arkansas rice farm appear to be in fairly good shape from a solvency position. The remaining five farms are vulnerable to extremely vulnerable (California, Texas and Louisiana).

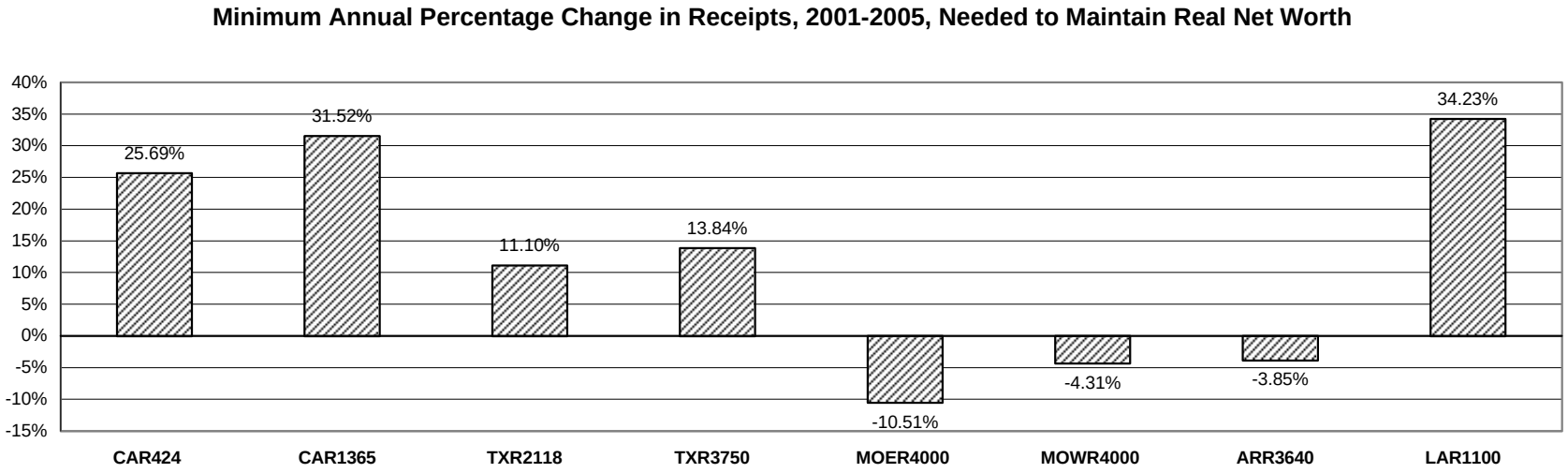
- The California and Louisiana operations would need additional income, the equivalent of 25-35 percent of gross receipts, to maintain real equity over the 2005 period (Figure 19). The Texas operations need additional income equivalent to 11-14 percent.

- Overall, AFPC classes 6 farms extremely vulnerable without additional assistance. The remaining 2 farms in Missouri (MOER4000) and Arkansas (ARR3640) are moderately vulnerable.

Table 8. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	CAR424	CAR1365	TXR2118	TXR3750	MOER4000	MOWR4000	ARR3640	LAR1100
Overall Financial Position								
2001-2005 Ranking	Poor	Poor	Poor	Poor	Marginal	Poor	Marginal	Poor
NIA to Maintain Real								
Net Worth ($1,000)	70.34	278.52	42.77	156.37	-140.59	-64.92	-43.94	91.11
NIA to Maintain Real								
Net Worth (% Rec.)	25.69	31.52	11.10	13.84	-10.51	-4.31	-3.85	34.23
Change Real Net Worth (%)								
2001-2005 Average	-11.59	-17.30	-5.37	-7.08	2.23	0.95	0.67	-59.96
Cost to Receipts Ratio (%)								
2001-2005 Average	107.61	124.21	94.07	106.88	75.45	83.44	77.16	124.42
Govt Payments/Receipts (%)								
2001-2005 Average	26.64	27.04	27.68	25.24	17.89	27.86	24.44	23.42
Total Cash Receipts ($1000)								
2000	358.67	1,103.82	510.44	1,454.76	1,493.98	1,959.72	1,565.25	305.31
2001	289.68	895.07	386.59	1,133.18	1,297.90	1,482.59	1,105.22	259.71
2002	289.17	893.70	389.37	1,143.88	1,311.80	1,480.47	1,115.40	265.47
2003	292.69	905.20	394.34	1,155.74	1,338.05	1,511.08	1,147.60	270.35
2004	293.88	909.07	394.98	1,156.99	1,357.20	1,524.95	1,158.87	273.05
2005	294.95	912.55	396.18	1,159.60	1,381.87	1,536.52	1,178.53	277.50
2001-2005 Average	292.07	903.12	392.29	1,149.88	1,337.36	1,507.12	1,141.12	269.21
Net Cash Farm Income ($1000)								
2000	63.31	98.34	157.19	291.13	557.76	819.73	737.94	19.16
2001	-12.30	-135.60	29.71	-57.76	326.68	307.63	241.66	-37.53
2002	-9.43	-134.45	39.73	-27.12	350.08	306.86	276.21	-35.56
2003	-11.90	-184.16	32.42	-27.50	367.02	312.15	295.03	-49.28
2004	-21.85	-242.73	26.76	-69.13	347.82	296.01	295.92	-67.80
2005	-34.03	-310.10	21.58	-101.26	339.56	297.05	304.09	-87.83
2001-2005 Average	-17.90	-201.41	30.04	-56.55	346.23	303.94	282.58	-55.60
Prob. of a Cash Flow Deficit (%)								
2001	99	99	90	95	28	45	63	99
2002	99	99	75	90	16	47	31	99
2003	99	99	89	88	19	50	49	99
2004	99	99	88	93	37	55	54	99
2005	99	99	92	97	53	56	55	99
Ending Cash Reserves ($1000)								
2000	26.89	112.33	299.31	608.77	1,301.50	2,078.79	1,577.18	-39.74
2001	-62.80	-108.50	262.09	427.10	1,409.59	2,137.18	1,564.63	-155.14
2002	-140.21	-314.63	245.08	267.22	1,549.89	2,176.71	1,635.56	-273.38
2003	-222.42	-640.70	204.85	132.49	1,693.40	2,184.17	1,680.49	-416.80
2004	-308.05	-1,015.53	155.72	-87.13	1,781.99	2,161.60	1,714.67	-562.58
2005	-401.69	-1,509.29	97.93	-320.09	1,824.88	2,131.88	1,739.38	-720.28
2001-2005 Average	-227.03	-717.73	193.13	83.92	1,651.95	2,158.31	1,666.95	-425.64
Nominal Net Worth ($1000)								
2000	641.12	1,829.73	708.69	2,328.93	4,653.85	6,413.39	4,974.27	187.38
2001	584.67	1,652.95	683.83	2,224.66	4,843.01	6,592.61	5,054.16	96.53
2002	515.44	1,409.43	656.22	2,065.94	4,911.47	6,595.92	5,050.86	-3.04
2003	434.78	1,068.17	607.01	1,931.97	4,985.02	6,593.04	5,034.74	-109.97
2004	359.47	700.35	563.45	1,720.97	5,063.33	6,630.14	5,063.36	-238.10
2005	267.45	245.16	514.16	1,491.69	5,129.87	6,660.42	5,096.81	-371.19
2001-2005 Average	432.36	1,015.21	604.94	1,887.05	4,986.54	6,614.42	5,059.99	-125.15
Prob. of Losing Real Net Worth (%)								
2001	99	99	75	78	3	21	14	99
2002	99	99	81	86	3	21	12	99
2003	99	99	86	91	2	28	18	99
2004	99	99	94	99	1	29	26	99
2005	99	99	96	99	3	28	21	99

Figure 19. Rice Farms



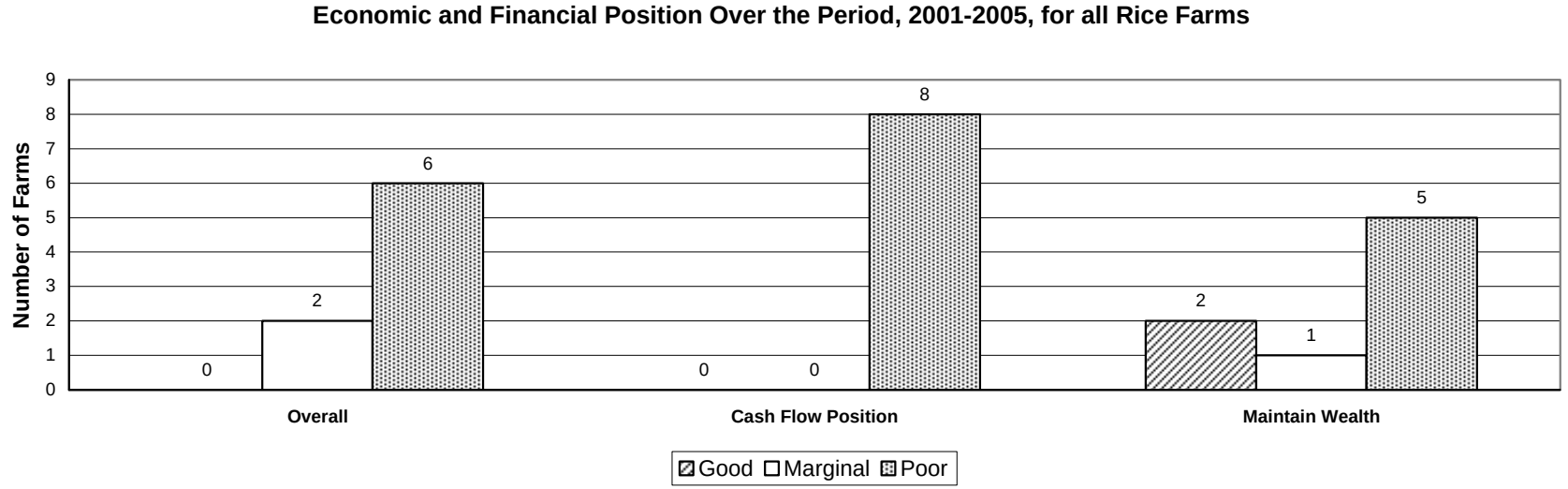


Figure 20. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

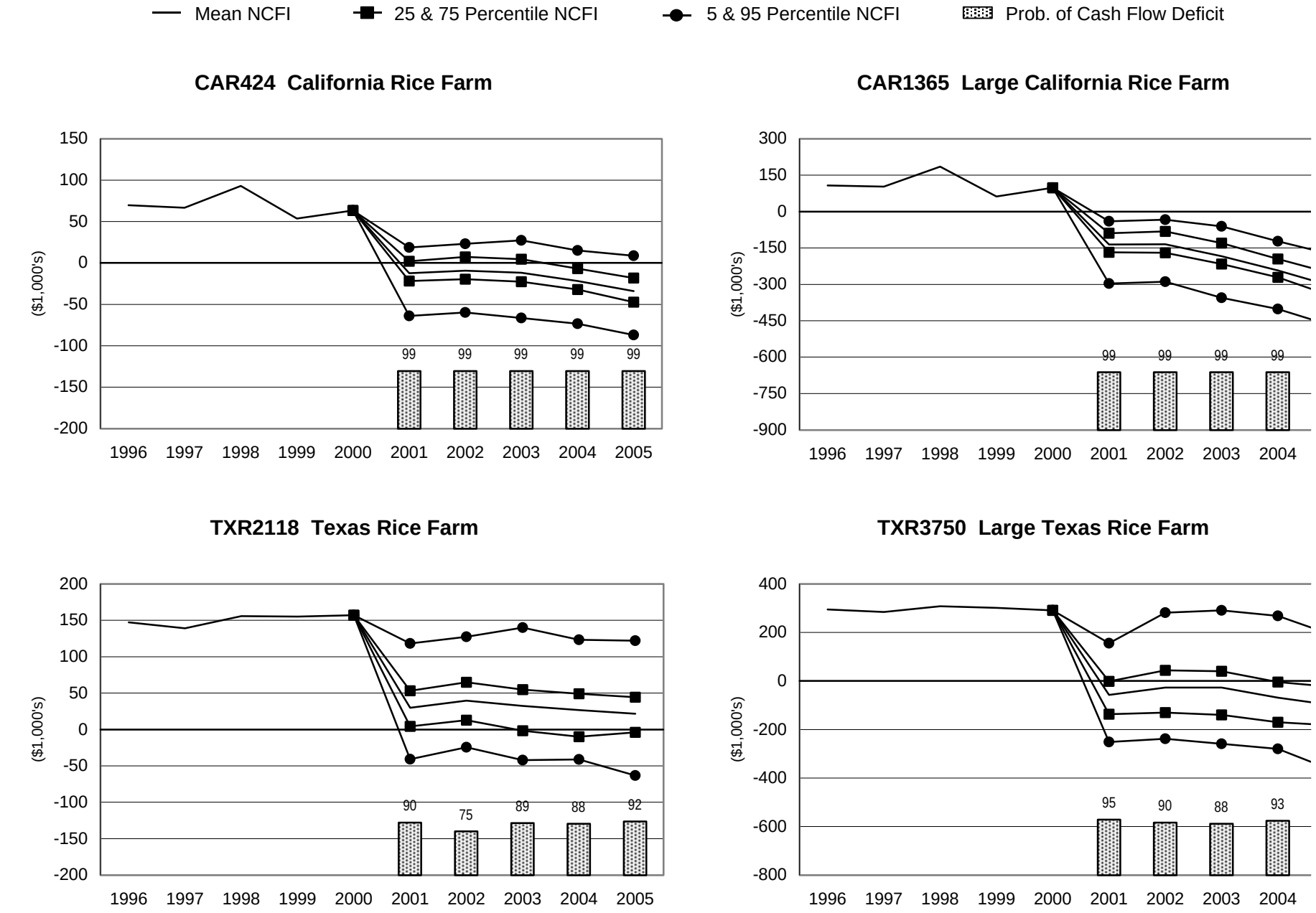


Figure 21. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

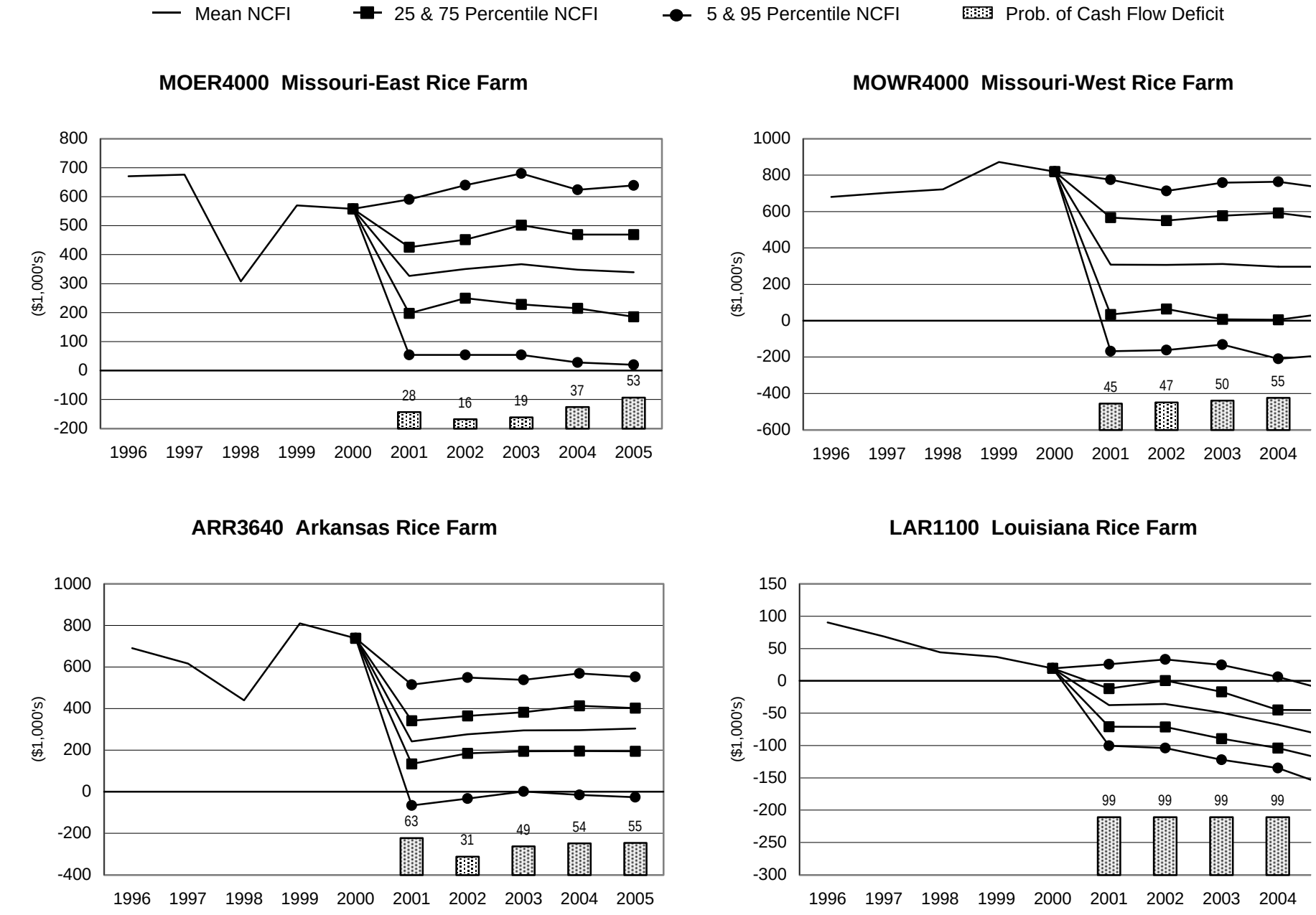
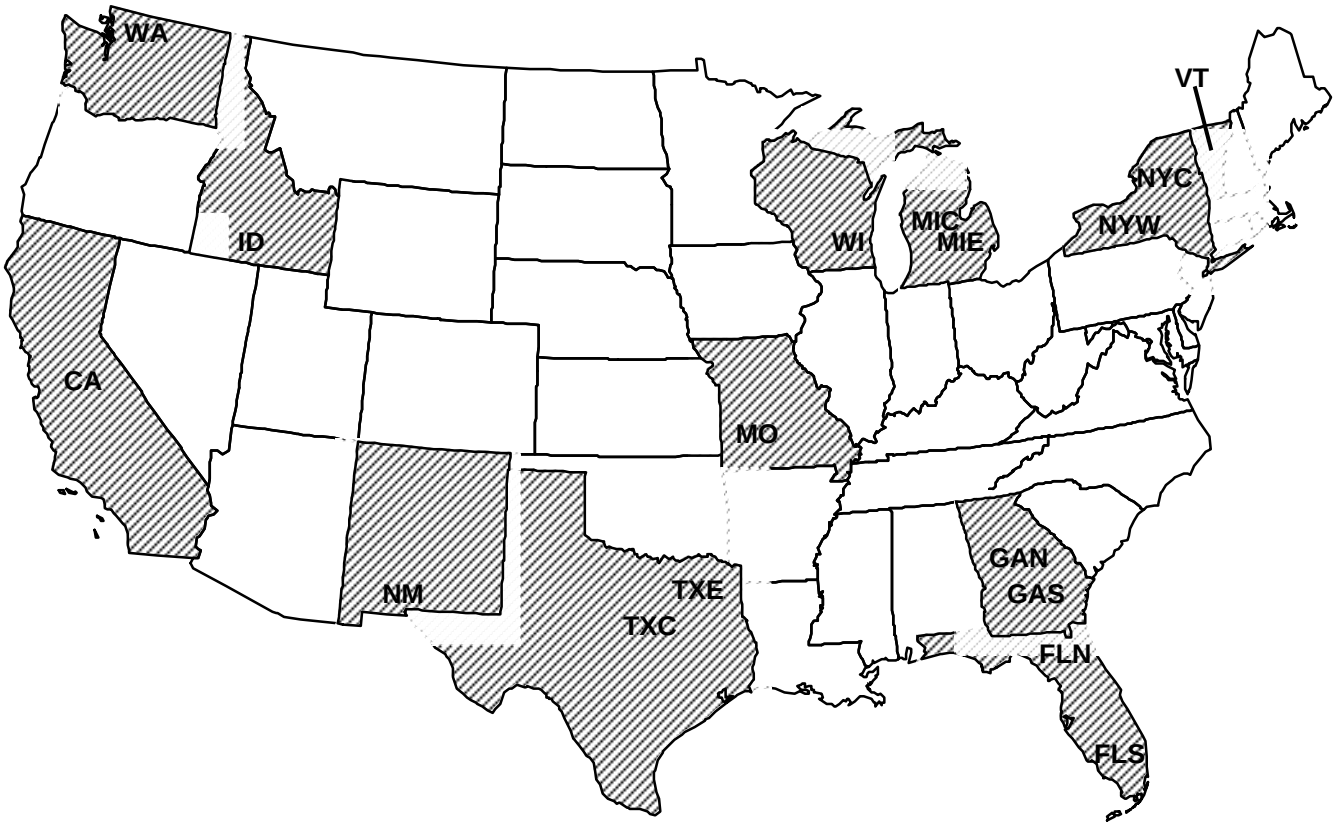


FIGURE 22. REPRESENTATIVE FARMS PRODUCING MILK



Dairy Impacts

- Sixteen of the 26 representative dairy farms increase real net worth over the 1996-2005 study period. The annual average increase in real net worth ranges from 0.65 percent on the large Washington (WAD900) to over 13 percent on the 825 cow large Central Texas dairy (TXCD825) (Figures 23-24). The strong increase in real net worth on the dairy farms is, in part, due to the increase in cull cattle prices through 2003, and the increase in the value of replacement stock.

- Twelve of the 26 dairies (WAD900, TXCD400, TXED310, TXED750, MICD140, MOD85, MIED200, WID600, VTD134, VTD350, FLSD1800, and GAND200) experience a high (greater than 40 percent) probability of losing real net worth in 2005. The probability of losing real net worth is more than 15 percent for an additional 3 dairies (Tables 9-11).

- The combination of low feed prices in the 1997-1999 crop years and high milk prices in 1998 allow the dairies to recover from the reverse situation in earlier years. Net cash farm income sharply rebounds in 1998 (Figures 25-31). While feed prices are low in the baseline milk prices are projected to remain relatively low in contrast to recent years. Low milk prices result in negative ending cash positions on nine of the dairies.

- This baseline, with relatively low milk prices, indicates significant income risk on a majority of the representative dairy farms (Figures 25-31). The dairy industry continues to experience a significant increase in milk price volatility. Volatile milk and feed prices result in significant income risk for these dairy farms.

- Seventeen of the dairies have a 25 percent or greater probability of a cash flow deficit in 2005, meaning that expenses and other cash flow requirements exceeded cash receipts in that year.

- Nine of the 26 dairy farms are classified as being in a good overall financial position. Three dairies are in a marginal financial position and fourteen are in poor overall financial shape by 2005. Those farms in poor shape are likely to suffer cash flow deficits more than 50 percent of the time over the next five years (Tables 9-11).

Table 9. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	CAD1710	NMD2000	WAD185	WAD900	IDD750	IDD2100	TXCD400	TXCD825	TXED310	TXED750
Overall Financial Position										
2001-2005 Ranking	Good	Poor	Marginal	Poor	Marginal	Good	Poor	Good	Poor	Poor
NIA to Maintain Real										
Net Worth ($1,000)	-531.32	-143.08	-56.00	-24.66	-84.26	-1,172.09	170.42	-728.50	33.83	-35.14
NIA to Maintain Real										
Net Worth (% Rec.)	-10.53	-2.33	-8.34	-0.79	-3.81	-19.15	15.52	-19.62	4.19	-1.74
Change Real Net Worth (%)										
2001-2005 Average	4.10	2.25	4.10	0.66	2.14	7.48	-32.26	13.24	-3.69	1.16
Cost to Receipts Ratio (%)										
2001-2005 Average	82.71	94.21	79.65	92.82	90.10	74.65	113.36	73.04	95.80	89.09
Govt Payments/Receipts (%)										
2001-2005 Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cash Receipts ($1000)										
2000	4,861.34	5,783.02	636.71	3,019.78	2,078.47	5,753.31	1,037.19	3,503.40	762.21	1,903.96
2001	4,984.29	6,017.92	663.78	3,090.54	2,167.79	5,995.09	1,080.05	3,648.61	794.06	1,982.85
2002	4,731.14	5,791.52	634.20	2,930.57	2,081.12	5,740.76	1,036.55	3,510.13	761.70	1,904.58
2003	5,053.69	6,127.70	670.95	3,125.70	2,221.78	6,140.85	1,098.52	3,716.44	808.30	2,018.02
2004	5,181.17	6,306.60	688.38	3,206.46	2,275.99	6,302.03	1,127.88	3,811.84	830.58	2,071.46
2005	5,268.63	6,438.13	701.97	3,269.10	2,311.26	6,416.38	1,148.47	3,880.11	846.98	2,110.13
2001-2005 Average	5,043.78	6,136.38	671.86	3,124.47	2,211.59	6,119.02	1,098.29	3,713.43	808.32	2,017.41
Net Cash Farm Income ($1000)										
2000	907.08	400.71	144.72	344.39	204.56	1,465.06	-90.23	908.59	48.83	233.50
2001	902.70	432.66	146.00	305.65	242.67	1,553.54	-96.40	989.71	45.31	253.37
2002	667.77	240.88	118.76	151.48	153.61	1,319.67	-146.22	869.22	18.81	177.94
2003	936.38	479.43	144.91	295.53	260.45	1,675.05	-123.40	1,051.12	52.24	259.91
2004	971.12	500.04	151.82	288.59	278.61	1,743.47	-145.60	1,099.24	55.56	271.96
2005	961.59	463.51	156.01	261.72	273.55	1,747.95	-172.96	1,112.06	54.07	268.24
2001-2005 Average	887.91	423.31	143.50	260.59	241.78	1,607.94	-136.92	1,024.27	45.20	246.28
Prob. of a Cash Flow Deficit (%)										
2001	18	54	56	61	62	18	99	1	99	58
2002	34	51	50	61	63	17	99	1	97	53
2003	16	47	51	48	51	6	99	1	94	42
2004	12	47	49	60	36	4	99	1	95	49
2005	15	54	55	73	36	1	99	1	91	56
Ending Cash Reserves ($1000)										
2000	2,547.22	244.28	377.12	352.39	650.99	3,932.70	-657.95	1,473.44	-116.20	115.05
2001	2,827.51	217.73	401.02	319.91	636.76	4,443.12	-842.50	1,929.05	-175.20	79.69
2002	3,052.23	165.39	415.50	248.73	598.45	4,931.75	-1,045.17	2,385.76	-227.14	77.14
2003	3,450.98	302.08	436.69	309.54	610.05	5,641.36	-1,235.78	2,960.26	-255.23	129.67
2004	3,878.25	429.21	467.85	315.42	706.90	6,587.26	-1,462.50	3,585.09	-286.63	178.97
2005	4,279.55	540.96	496.36	284.82	797.71	7,564.11	-1,720.76	4,222.84	-323.28	223.66
2001-2005 Average	3,497.70	331.07	443.49	295.68	669.97	5,833.52	-1,261.34	3,016.60	-253.49	137.83
Nominal Net Worth ($1000)										
2000	9,909.52	5,699.68	1,104.88	3,987.44	3,206.25	11,236.04	636.99	4,184.68	879.62	2,996.58
2001	10,497.74	5,974.90	1,172.81	4,147.27	3,352.70	12,206.15	505.59	4,790.59	876.77	3,115.50
2002	10,743.29	5,984.66	1,205.75	4,104.44	3,366.56	12,855.76	305.39	5,262.83	830.48	3,107.25
2003	11,123.96	6,158.77	1,247.54	4,155.77	3,440.44	13,706.83	113.72	5,736.29	805.31	3,142.44
2004	11,512.66	6,258.57	1,287.18	4,147.71	3,494.36	14,522.33	-118.78	6,324.02	764.42	3,154.85
2005	11,839.13	6,288.12	1,320.27	4,083.88	3,519.68	15,304.77	-387.21	6,896.00	711.08	3,142.97
2001-2005 Average	11,143.35	6,133.00	1,246.71	4,127.81	3,434.75	13,719.17	83.74	5,801.95	797.61	3,132.60
Prob. of Losing Real Net Worth (%)										
2001	1	21	9	28	23	1	89	1	45	24
2002	1	23	9	31	23	1	96	1	58	21
2003	1	34	6	33	20	1	99	1	60	33
2004	1	26	7	37	23	1	99	1	63	32
2005	1	32	6	42	24	1	99	1	75	40

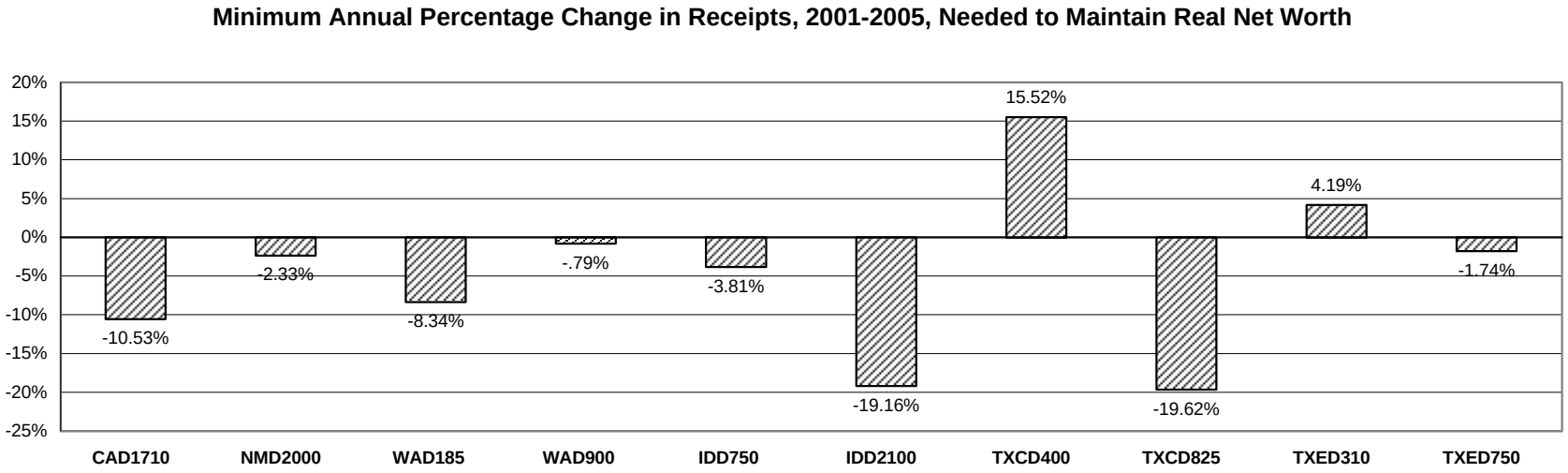
Table 10. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	WID70	WID600	MIED200	MICD140	NYWD800	NYWD1200	NYCD110	NYCD400	VTD134	VTD350
Overall Financial Position										
2001-2005 Ranking	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Poor	Poor
NIA to Maintain Real										
Net Worth ($1,000)	-8.67	13.19	35.15	46.42	-333.75	-610.41	-70.07	-359.82	24.94	35.04
NIA to Maintain Real										
Net Worth (% Rec.)	-3.72	0.72	5.18	10.08	-11.15	-13.51	-17.18	-23.66	6.48	2.88
Change Real Net Worth (%)										
2001-2005 Average	1.36	-0.38	-2.21	-4.94	6.33	7.96	7.02	10.06	-4.50	-1.57
Cost to Receipts Ratio (%)										
2001-2005 Average	76.25	94.18	92.96	94.27	81.84	80.64	67.25	65.42	90.27	91.53
Govt Payments/Receipts (%)										
2001-2005 Average	0.00	0.00	0.15	0.16	0.00	0.00	0.00	0.00	0.00	0.00
Total Cash Receipts ($1000)										
2000	216.94	1,708.39	643.11	435.57	2,826.45	4,283.46	382.39	1,427.42	380.01	1,194.49
2001	220.71	1,733.45	674.29	458.11	2,962.86	4,471.15	405.48	1,508.67	390.29	1,226.12
2002	220.61	1,732.08	637.43	434.48	2,837.06	4,284.84	386.98	1,442.27	362.60	1,137.85
2003	235.98	1,857.00	677.34	460.67	2,988.20	4,512.67	407.08	1,518.30	384.54	1,207.90
2004	241.49	1,904.33	694.58	470.93	3,054.15	4,614.74	416.04	1,550.33	393.56	1,239.54
2005	245.53	1,940.17	707.61	478.64	3,119.02	4,714.95	424.17	1,583.54	399.32	1,262.09
2001-2005 Average	232.86	1,833.41	678.25	460.57	2,992.26	4,519.67	407.95	1,520.62	386.06	1,214.70
Net Cash Farm Income ($1000)										
2000	49.51	159.33	67.79	36.51	555.43	843.19	122.96	484.56	40.37	149.24
2001	47.56	87.50	63.98	36.69	580.23	944.22	132.86	531.46	49.30	142.83
2002	49.96	79.97	35.84	18.85	466.97	757.10	119.32	475.90	25.42	61.36
2003	62.43	172.50	62.71	37.46	571.29	916.71	136.71	542.69	42.13	113.90
2004	64.43	166.23	64.38	28.12	579.83	925.58	142.49	550.69	42.02	116.76
2005	65.56	160.35	56.91	22.17	598.64	943.33	146.22	562.46	39.13	113.67
2001-2005 Average	57.99	133.31	56.77	28.66	559.39	897.39	135.52	532.64	39.60	109.70
Prob. of a Cash Flow Deficit (%)										
2001	83	79	99	99	16	6	4	1	99	75
2002	68	65	99	99	22	9	7	1	99	93
2003	58	52	97	99	7	5	1	1	99	86
2004	53	57	98	99	14	4	2	1	98	81
2005	62	63	96	99	11	8	1	1	99	88
Ending Cash Reserves ($1000)										
2000	51.38	654.42	-85.19	-139.32	889.15	1,764.70	145.43	646.63	-43.17	-3.15
2001	33.97	547.40	-153.01	-203.93	1,054.77	2,121.26	177.51	850.07	-74.04	-36.99
2002	26.50	478.33	-205.46	-257.42	1,216.69	2,461.94	210.08	1,055.17	-108.17	-99.90
2003	27.00	489.08	-235.08	-295.40	1,452.66	2,919.13	253.48	1,300.42	-128.01	-121.73
2004	30.44	470.95	-263.49	-356.88	1,685.36	3,371.06	295.10	1,542.66	-149.97	-146.91
2005	33.86	446.18	-312.25	-423.71	1,943.42	3,829.86	340.86	1,798.48	-173.46	-171.72
2001-2005 Average	30.36	486.39	-233.86	-307.47	1,470.58	2,940.65	255.41	1,309.36	-126.73	-115.45
Nominal Net Worth ($1000)										
2000	567.35	2,594.31	1,273.61	900.30	4,035.80	6,068.56	722.86	2,476.71	517.90	1,638.10
2001	582.71	2,600.64	1,283.89	883.85	4,394.98	6,694.63	786.21	2,767.44	518.42	1,676.99
2002	581.13	2,558.60	1,235.61	834.04	4,582.03	7,085.85	830.07	2,978.67	486.42	1,616.59
2003	586.53	2,582.95	1,205.89	796.60	4,823.66	7,572.23	879.57	3,217.08	467.32	1,594.70
2004	595.88	2,560.85	1,172.45	738.55	5,050.37	7,996.41	922.94	3,452.56	435.79	1,548.73
2005	600.65	2,523.21	1,123.55	672.07	5,267.79	8,412.76	968.17	3,691.01	398.02	1,496.40
2001-2005 Average	589.38	2,565.25	1,204.28	785.02	4,823.77	7,552.38	877.39	3,221.35	461.20	1,586.68
Prob. of Losing Real Net Worth (%)										
2001	20	42	43	58	1	1	1	1	42	31
2002	24	47	52	76	3	1	1	1	62	43
2003	27	49	64	91	1	1	1	1	77	53
2004	29	52	67	91	1	1	1	1	84	63
2005	28	56	75	98	1	1	1	1	90	73

Table 11. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	MOD85	MOD330	GAND200	GASD700	FLND500	FLSD1800
Overall Financial Position						
2001-2005 Ranking	Poor	Marginal	Poor	Good	Good	Poor
NIA to Maintain Real						
Net Worth ($1,000)	47.37	-103.58	13.22	-345.80	-192.34	254.23
NIA to Maintain Real						
Net Worth (% Rec.)	20.88	-11.18	2.31	-13.76	-11.42	4.54
Change Real Net Worth (%)						
2001-2005 Average	-11.20	4.31	-46.89	6.04	8.73	-5.83
Cost to Receipts Ratio (%)						
2001-2005 Average	106.13	73.49	104.44	76.06	78.40	93.89
Govt Payments/Receipts (%)						
2001-2005 Average	0.00	0.00	0.00	0.00	0.00	0.00
Total Cash Receipts ($1000)						
2000	215.22	878.10	602.53	2,387.23	1,602.79	5,319.91
2001	227.11	927.37	632.42	2,496.82	1,683.19	5,591.37
2002	213.80	869.45	600.09	2,388.21	1,602.01	5,316.42
2003	226.85	925.24	632.65	2,506.52	1,676.16	5,567.51
2004	231.76	947.54	647.79	2,563.67	1,717.88	5,707.98
2005	234.95	963.37	660.59	2,612.49	1,743.16	5,792.21
2001-2005 Average	226.89	926.59	634.71	2,513.54	1,684.48	5,595.10
Net Cash Farm Income ($1000)						
2000	5.70	247.88	0.03	577.09	411.43	457.96
2001	-0.57	259.05	-8.46	604.16	363.99	475.45
2002	-12.49	214.74	-33.04	532.06	318.73	223.50
2003	-6.53	261.37	-13.79	625.79	386.27	386.29
2004	-13.16	270.04	-23.75	652.73	402.29	420.41
2005	-23.11	268.61	-35.53	667.96	397.58	412.77
2001-2005 Average	-11.17	254.76	-22.91	616.54	373.77	383.68
Prob. of a Cash Flow Deficit (%)						
2001	99	33	99	18	16	99
2002	99	35	99	15	12	99
2003	99	23	99	6	12	99
2004	99	29	99	11	13	99
2005	99	38	99	7	10	97
Ending Cash Reserves ($1000)						
2000	-191.09	256.14	-233.50	921.33	111.58	-714.59
2001	-251.12	300.00	-324.59	1,077.87	214.38	-965.84
2002	-312.45	345.65	-412.76	1,254.36	340.15	-1,290.13
2003	-365.50	413.93	-487.16	1,479.67	501.20	-1,511.49
2004	-426.16	477.98	-575.84	1,727.69	678.54	-1,712.11
2005	-504.57	532.49	-679.86	1,978.16	854.69	-1,923.60
2001-2005 Average	-371.96	414.01	-496.04	1,503.55	517.79	-1,480.63
Nominal Net Worth ($1000)						
2000	490.18	1,739.72	160.77	3,888.15	1,654.08	3,336.20
2001	466.58	1,856.61	116.28	4,171.22	1,852.31	3,333.79
2002	407.88	1,908.41	41.00	4,346.76	1,979.51	3,033.33
2003	354.83	1,980.40	-22.97	4,572.65	2,034.67	2,810.77
2004	293.15	2,043.31	-108.59	4,802.93	2,202.11	2,595.43
2005	213.90	2,096.35	-214.33	5,018.68	2,356.22	2,343.38
2001-2005 Average	347.27	1,977.02	-37.72	4,582.45	2,084.97	2,823.34
Prob. of Losing Real Net Worth (%)						
2001	77	5	75	2	1	43
2002	99	5	90	3	2	67
2003	99	2	93	2	3	71
2004	99	3	94	3	1	77
2005	99	1	99	1	1	83

Figure 23. Dairy Farms



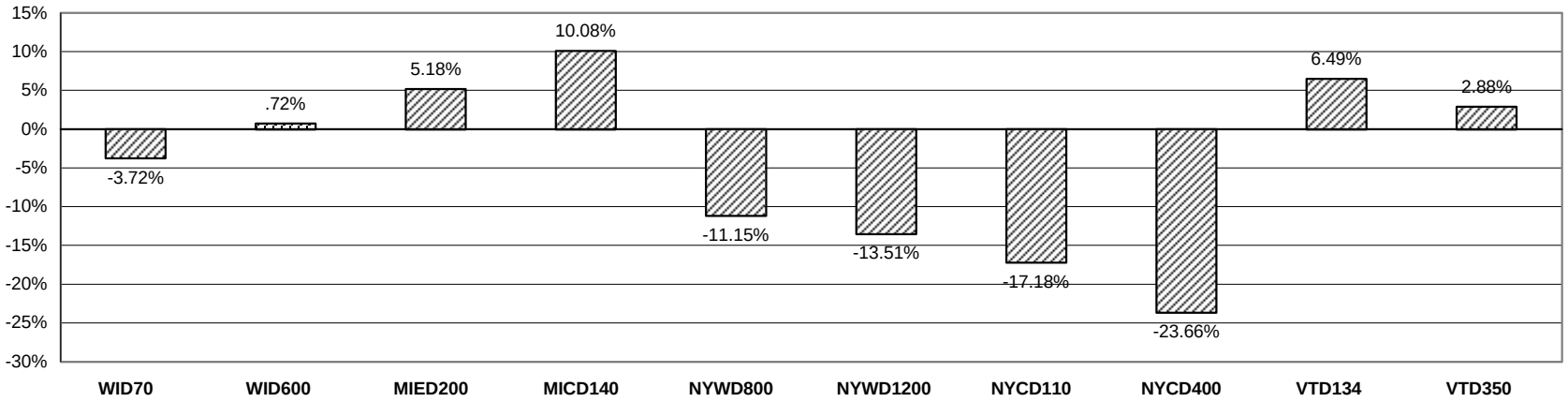
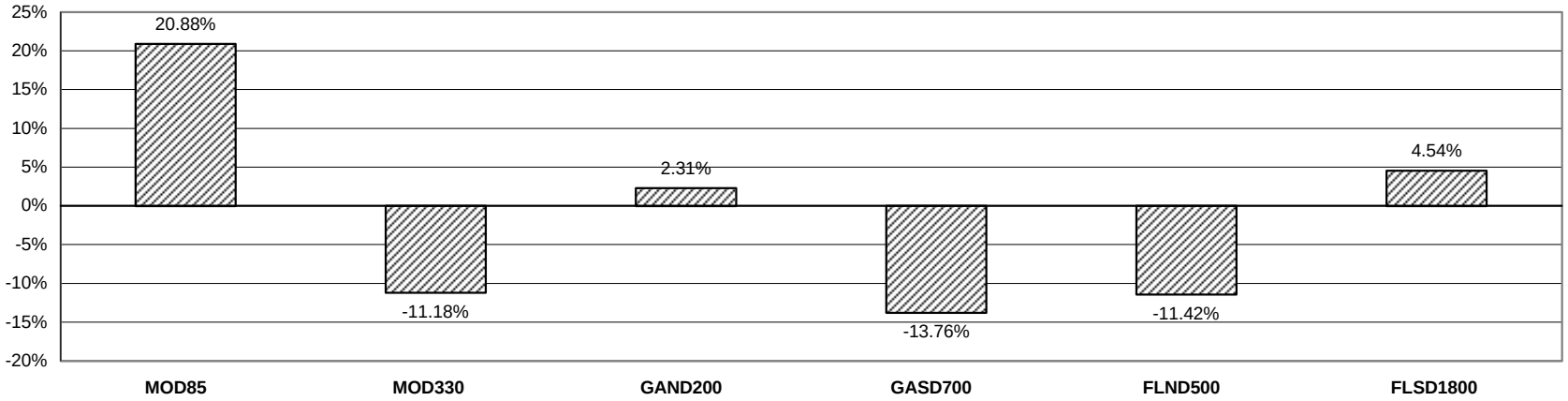


Figure 24. Dairy Farms

Minimum Annual Percentage Change in Receipts, 2001-2005, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2001-2005, for all Dairy Farms

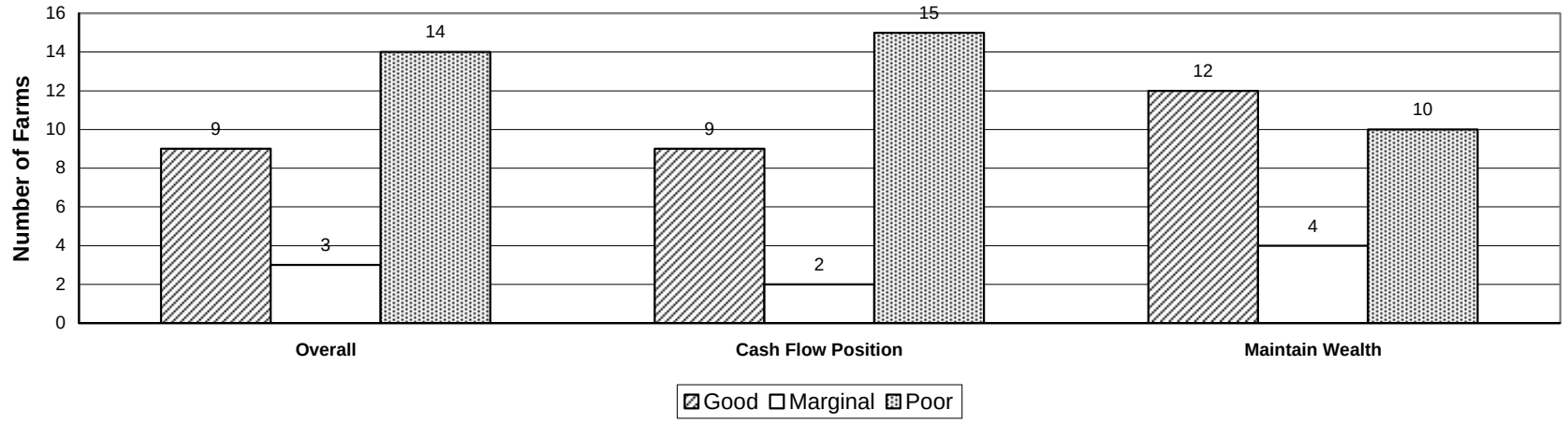


Figure 25. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

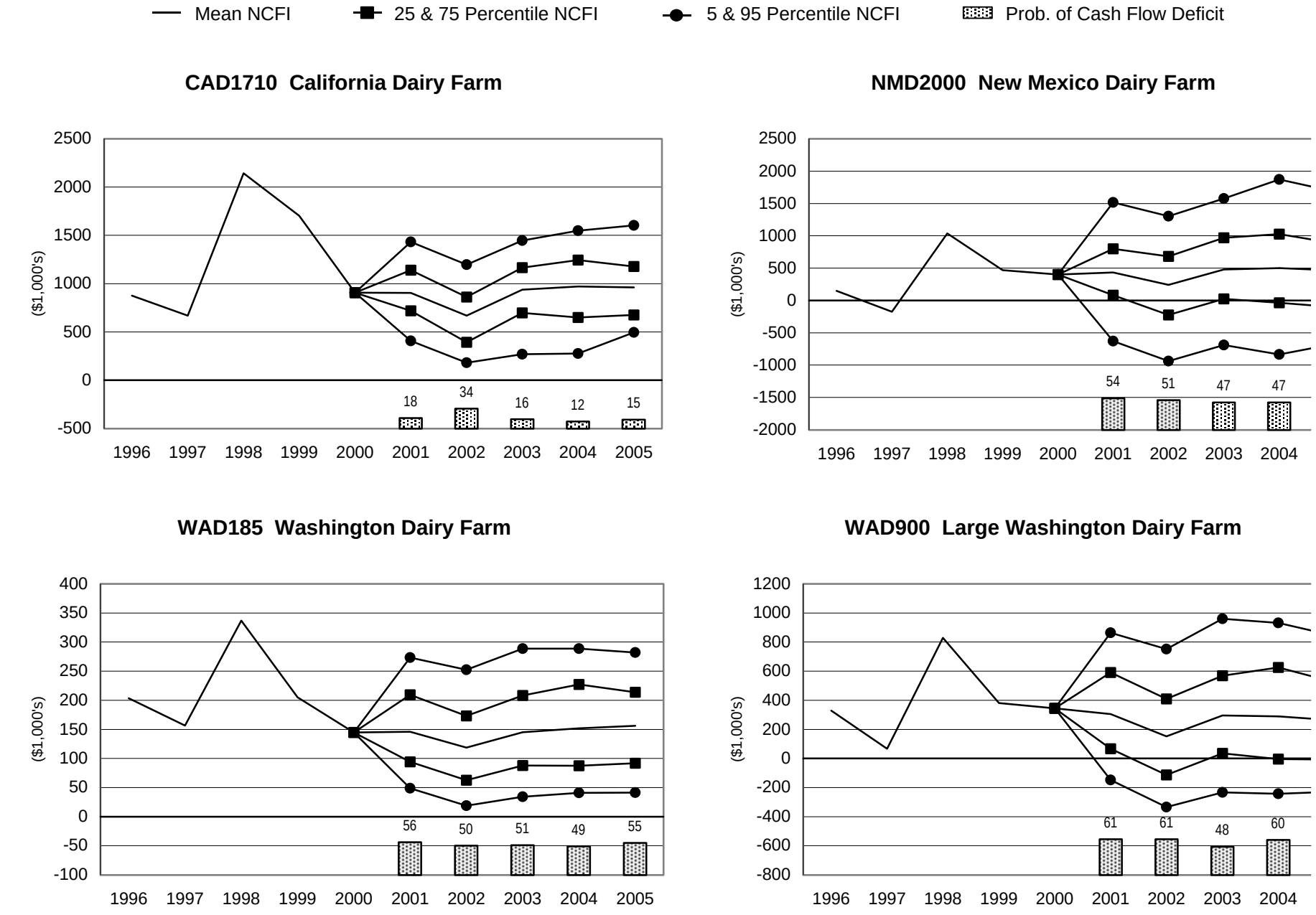


Figure 26. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

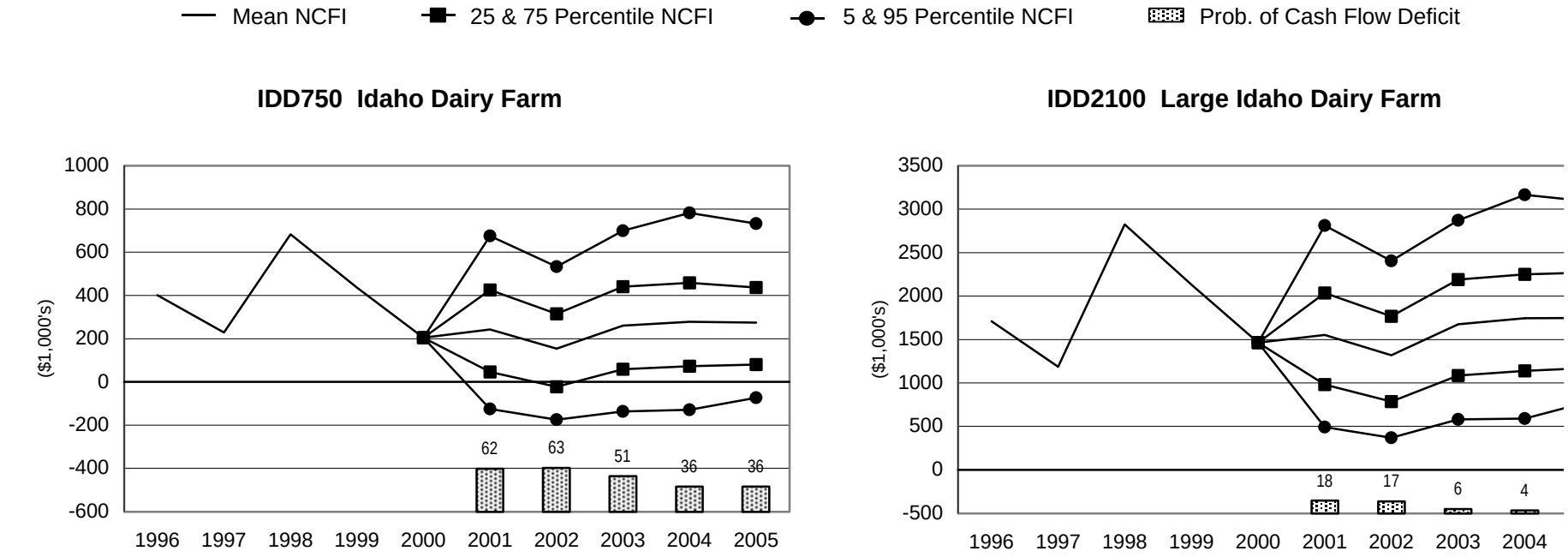


Figure 27. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

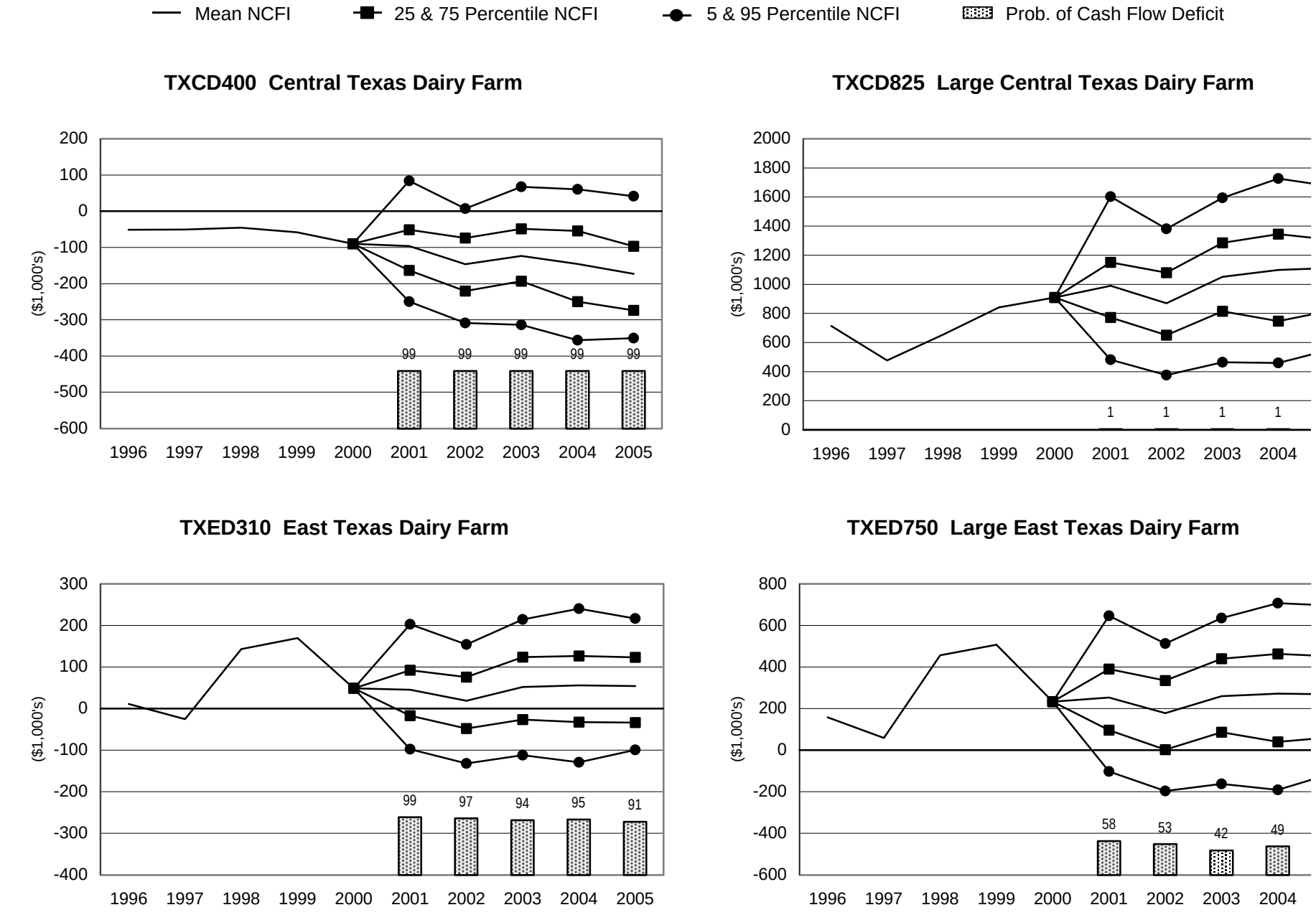


Figure 28. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

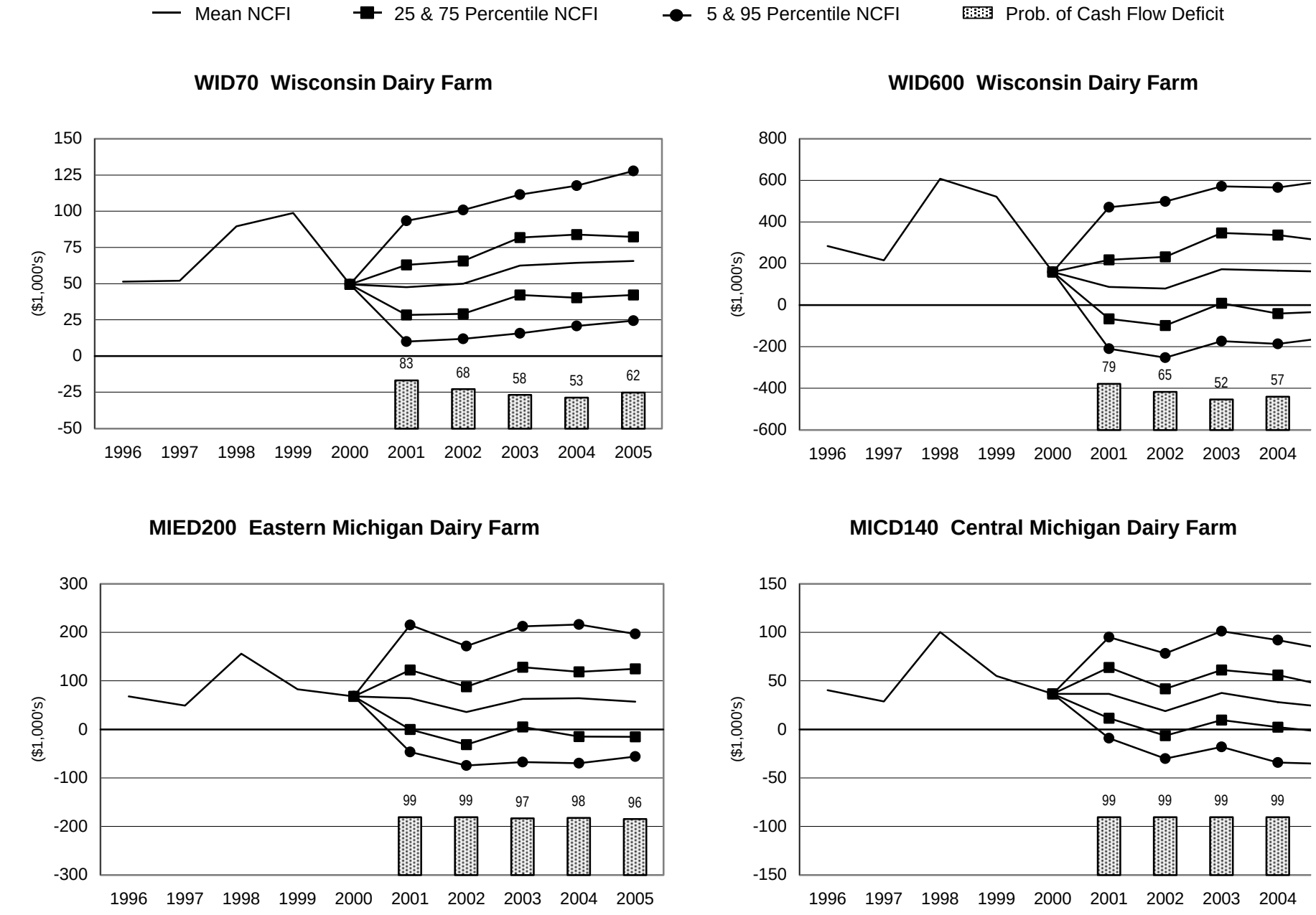


Figure 29. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

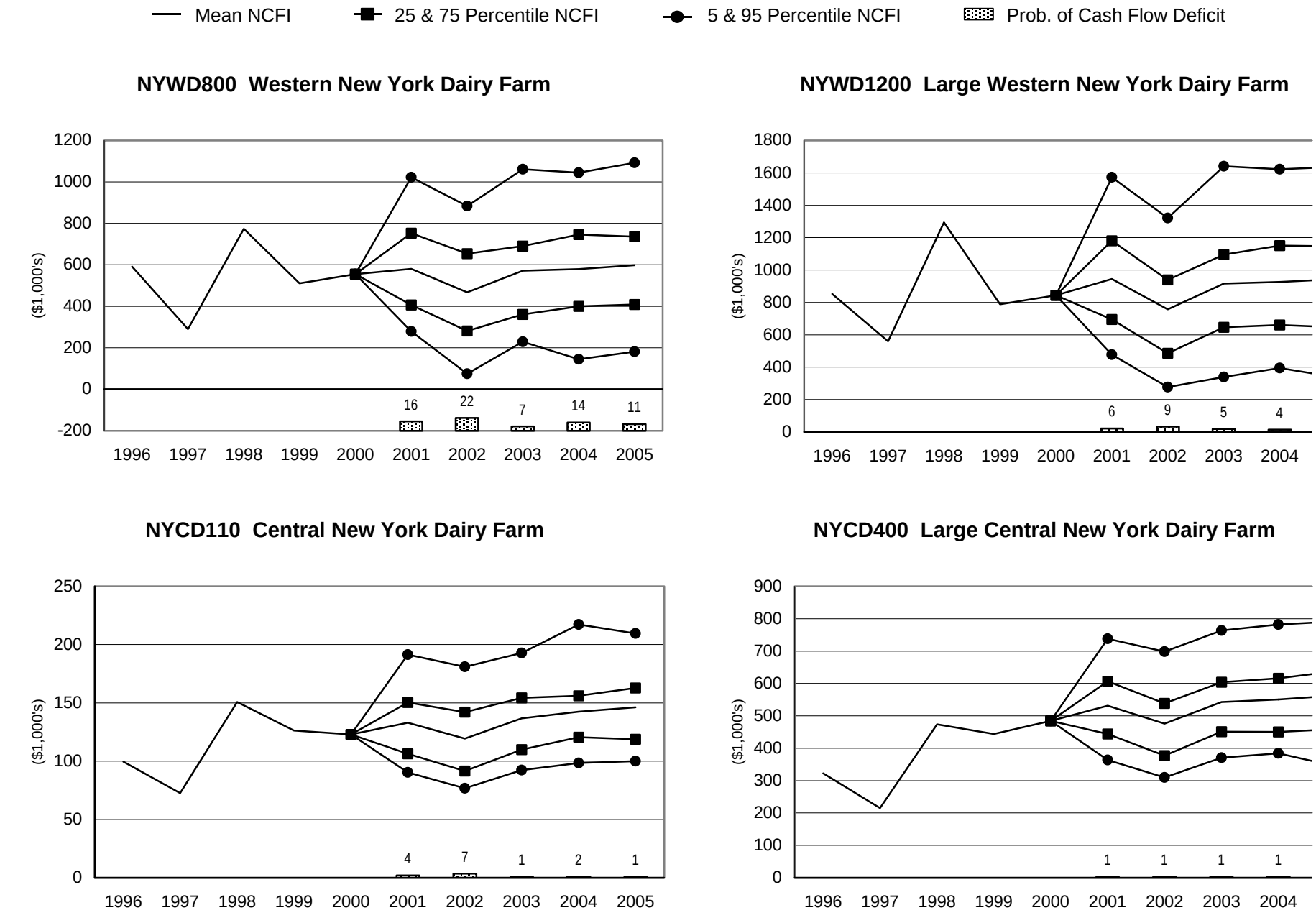


Figure 30. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

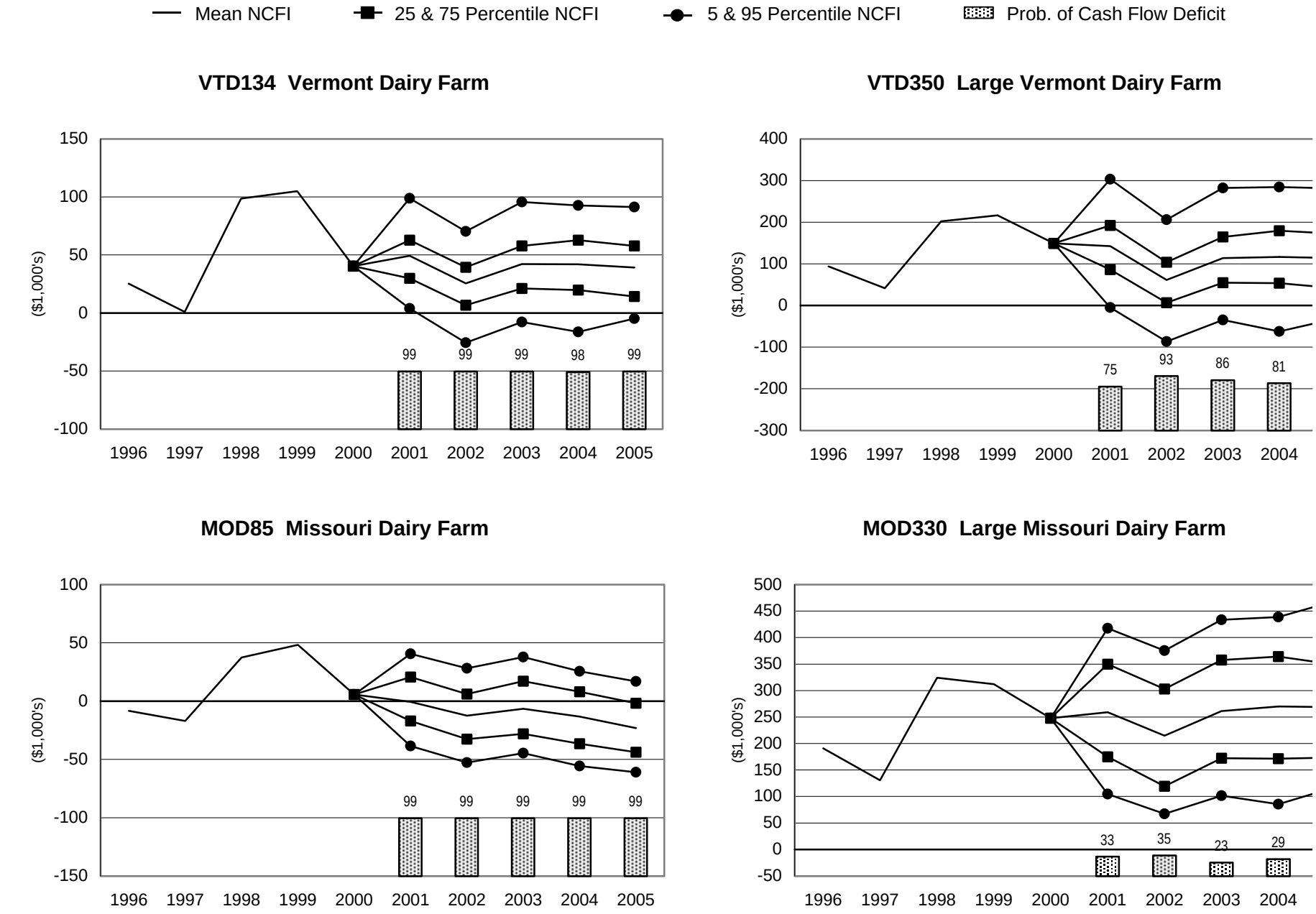


Figure 31. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

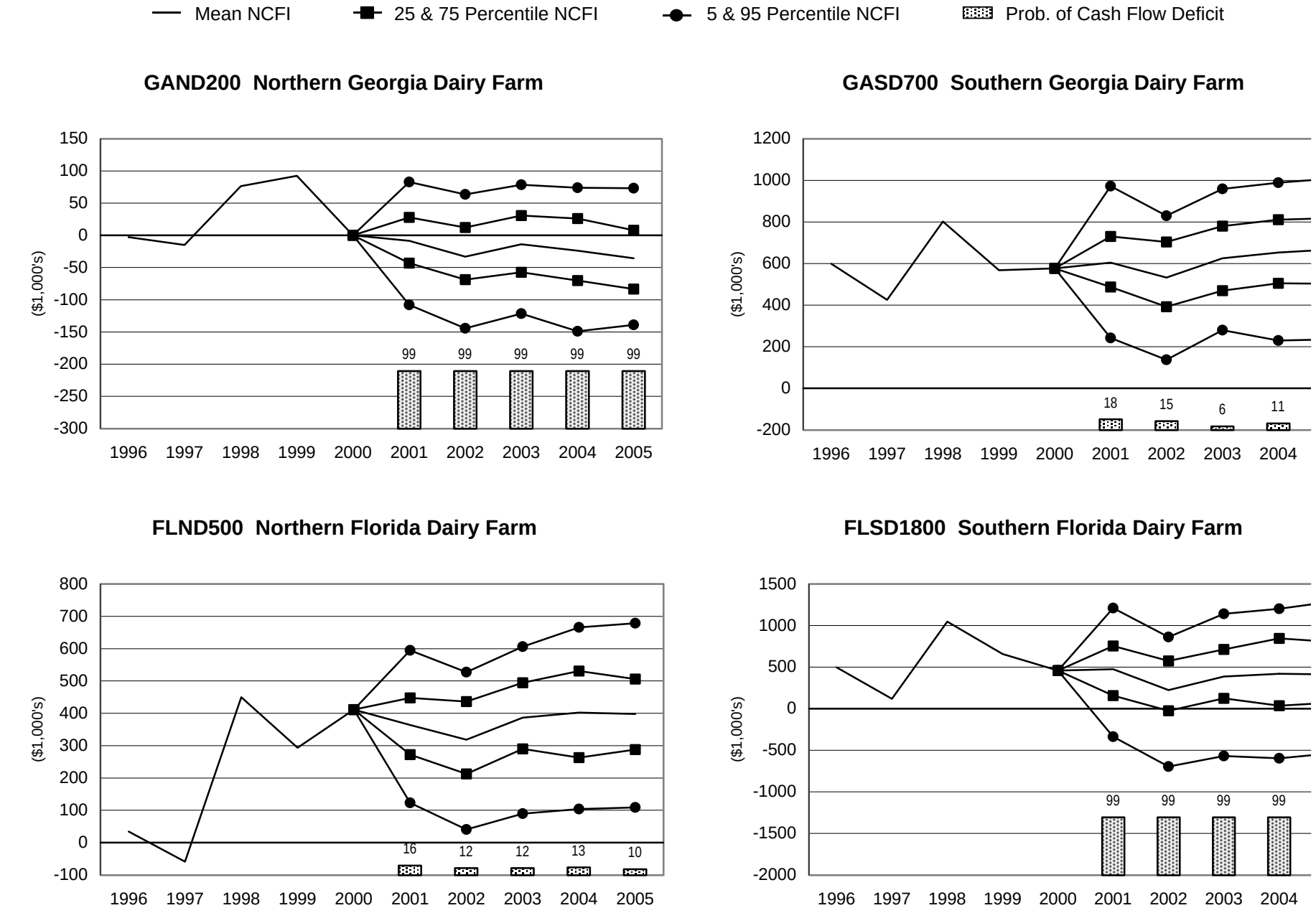
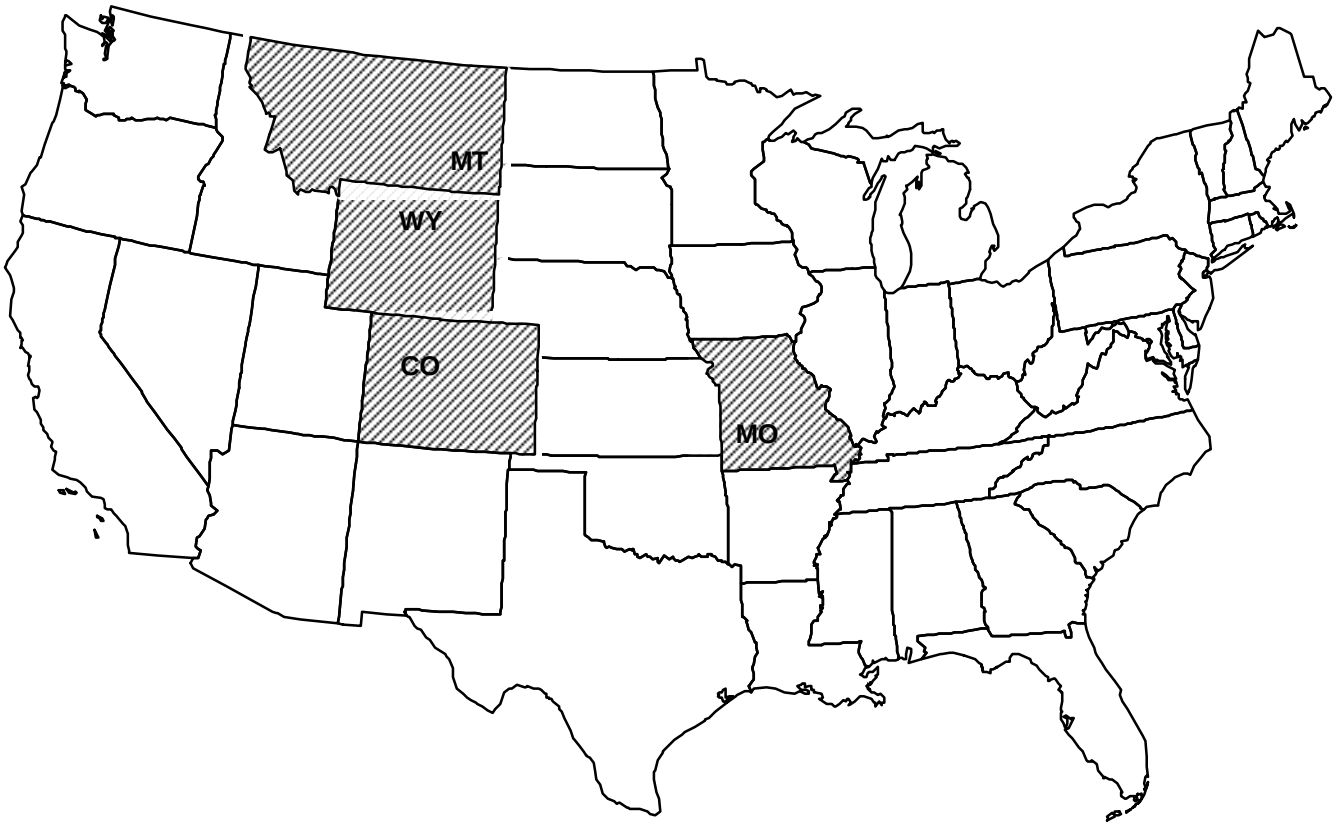


FIGURE 32. REPRESENTATIVE FARMS PRODUCING BEEF CATTLE



Beef Cattle Impacts

- The beef cattle outlook is generally positive due to the upturn in cattle prices projected over the study period. Feeder cattle prices are projected to rise from approximately $61/cwt. in 1996 to $98.41/cwt. in 2003 then fall to $87.24 in 2005.

- Ending cash reserves grow over the period for the Wyoming, Montana, Colorado and Missouri ranches.

- Net cash farm incomes show improvement over the 2000-2004 period as cattle prices rebound (Table 12 and Figure 33). These ranches sell calves and use little purchased feed, so low feed prices have mostly indirect effects on the operations. The large number of cows on the Montana ranch (MTB500) allows it to better capitalize on higher cattle prices by accumulating more cash reserves than the smaller operations in Wyoming and Colorado (WYB300 and COB250).

- The upward trend in cattle prices outpaces inflation and higher feed costs to increase average annual net cash incomes. The risk associated with net cash income is projected to increase due to uncertainty about prices and the effects of compounding financial problems for operations with low rates of return (Figure 34).

- Eight other representative farms have cattle operations ranging from 20 to 200 cows. Increasing returns from cattle throughout the study period contribute positively to the bottom line for those representative farms.

Table 12. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle.

	MTB500	WYB300	COB250	MOB150
Overall Financial Position				
2001-2005 Ranking	Good	Good	Poor	Good
NIA to Maintain Real				
Net Worth ($1,000)	-41.88	-11.56	46.62	-29.72
NIA to Maintain Real				
Net Worth (% Rec.)	-15.00	-7.15	38.24	-21.64
Change Real Net Worth (%)				
2001-2005 Average	1.82	0.31	-0.58	2.63
Cost to Receipts Ratio (%)				
2001-2005 Average	61.94	61.45	69.06	54.74
Govt Payments/Receipts (%)				
2001-2005 Average	0.00	0.00	0.00	5.58
Total Cash Receipts ($1000)				
2000	271.98	159.54	118.71	136.94
2001	289.69	164.15	128.59	136.97
2002	289.92	166.36	130.00	138.76
2003	286.33	167.76	132.75	140.37
2004	274.09	160.51	127.27	137.74
2005	255.80	149.76	120.86	132.96
2001-2005 Average	279.17	161.71	127.89	137.36
Net Cash Farm Income ($1000)				
2000	88.79	57.60	32.39	58.71
2001	108.03	59.27	38.26	56.93
2002	116.08	69.01	46.41	63.42
2003	117.95	72.06	45.83	68.20
2004	108.89	63.34	41.88	66.56
2005	91.21	55.20	33.64	61.54
2001-2005 Average	108.44	63.78	41.21	63.33
Prob. of a Cash Flow Deficit (%)				
2001	99	99	69	23
2002	47	43	26	6
2003	18	23	12	1
2004	5	19	15	1
2005	7	18	31	1
Ending Cash Reserves ($1000)				
2000	-109.93	-30.24	-13.93	30.64
2001	-68.00	-24.93	-8.96	37.52
2002	-7.12	-1.50	15.67	60.13
2003	52.21	26.47	38.10	90.12
2004	104.51	47.74	54.11	122.27
2005	138.74	63.26	61.20	150.70
2001-2005 Average	44.07	22.21	32.03	92.15
Nominal Net Worth ($1000)				
2000	2,150.48	3,391.17	6,675.59	845.79
2001	2,267.26	3,494.48	6,819.79	885.01
2002	2,298.67	3,472.20	6,711.52	903.39
2003	2,325.54	3,444.17	6,580.26	923.07
2004	2,339.78	3,436.50	6,512.42	938.95
2005	2,326.73	3,414.52	6,426.23	949.01
2001-2005 Average	2,311.60	3,452.37	6,610.05	919.89
Prob. of Losing Real Net Worth (%)				
2001	15	1	1	5
2002	8	3	1	1
2003	1	4	52	1
2004	4	13	98	1
2005	2	17	99	1

Figure 33. Cattle Ranches

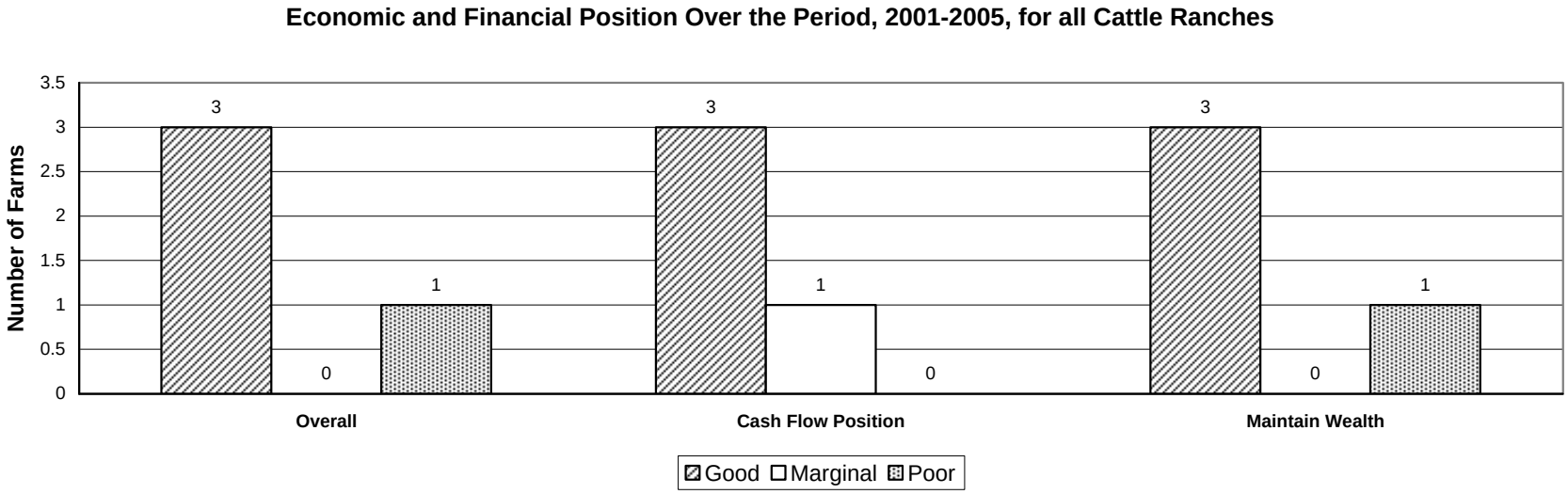


Figure 34. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cattle Ranches

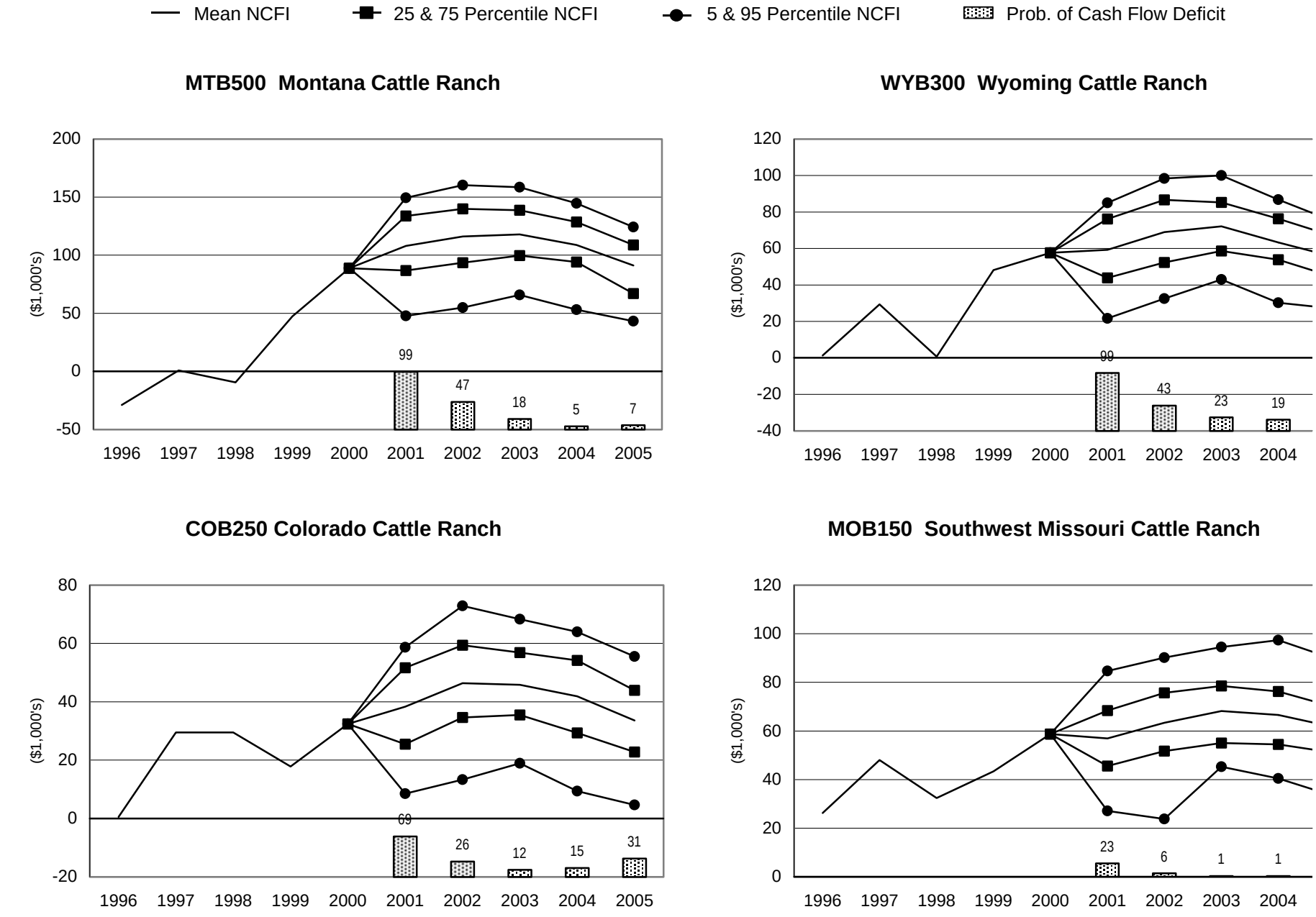


FIGURE 35. REPRESENTATIVE FARMS PRODUCING HOGS

Hog Farm Impacts

- Baseline projected hog prices range from a low of $34.00 per cwt. in 1999 to a high of $45.63 per cwt. in 2004.

- Five of the six representative hog farms experience an increase in real equity over the 2000-2005 period. The annual real equity growth ranges from -5.8 percent on the moderate Indiana (INH200) farm to about 6.3 percent on the NCH350. Annual real equity growth on the large contract farming operation in North Carolina is substantially higher than the other farms at 14 percent.

- The two Central Missouri hog farms reported in past Baselines are not included because they exited the industry in 1998 and 1999. The local facilitator reported that almost all independent farrow-to-finish farms in the area were either out of business or feeding hogs on contract for other firms.

- The two Illinois farms (ILH180 and ILH650) adjusted to the low prices in 1998 by reducing the number of sows and reducing costs. The farms survived the low prices, but the probability of a cash flow deficit is likely to remain high (above 40 percent) for the moderate size farm (ILH180) by 2005. The large farm is likely to see the probability of cash flow deficits decline to 22 percent by 2005.

- The two Indiana farms (INH200 and INH1200) are examples of farms that took advantage of high hog prices in 1996 and 1997 to expand and take on more debt. As a result the two farms have high probabilities of cash flow deficits each year of the planning horizon (Table 13). The larger farm will likely improve over the 2001-2005 period. The probability of the larger farm having to refinance deficits improves from 77 percent in 2001 to 36 percent in 2005. The moderate farm, however, continues to build cash flow deficits and ever larger negative ending cash reserves.

- Net incomes on the North Carolina farms were severely impacted by low hog prices in 1998 and 1999, however, they will likely recover, although at lower levels of income than the start of the period (Figure 38). Net cash income for the large farm was about $7 million in 1996 and 1997 and was negative in 1998. Over the 2000-2005 period the large farm's net cash farm income gradually increases to $7.1 million in 2004 and then falls to $5.1 million as hog prices decline in 2005.

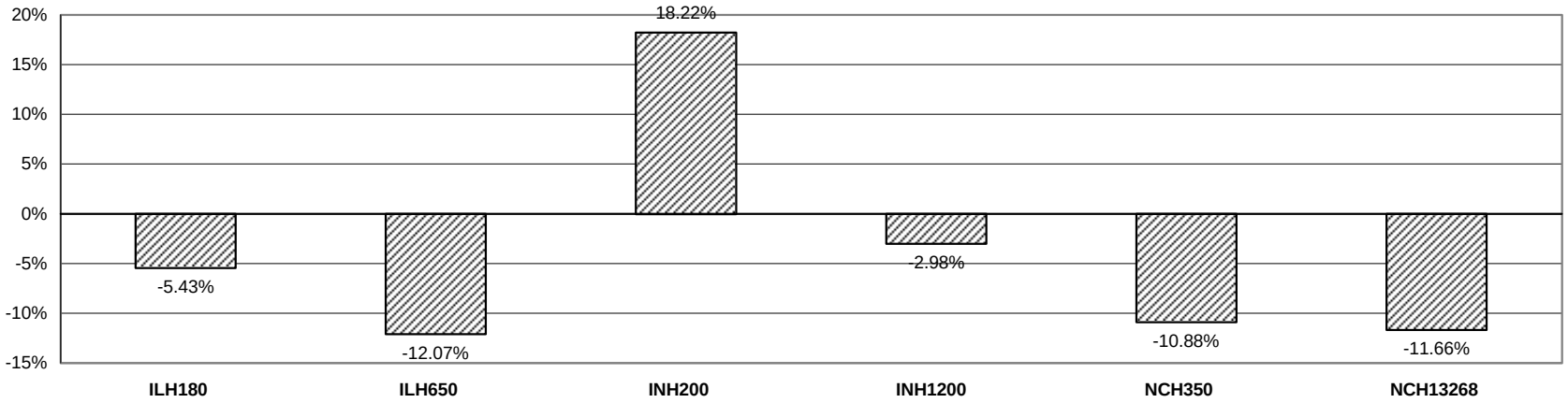
- Overall, three of the six farms are classified in good financial condition, two are classified as marginal and one is rated as being in poor financial condition for the 2001-2005 period.

Table 13. Implications of the 1996 Farm Bill and the January 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Hogs.

	ILH180	ILH650	INH200	INH1200	NCH350	NCH13268
Overall Financial Position						
2001-2005 Ranking	Marginal	Good	Poor	Marginal	Good	Good
NIA to Maintain Real						
Net Worth ($1,000)	-29.19	-218.21	82.24	-93.31	-80.73	-3,195.95
NIA to Maintain Real						
Net Worth (% Rec.)	-5.43	-12.07	18.22	-2.98	-10.88	-11.66
Change Real Net Worth (%)						
2001-2005 Average	2.00	3.38	-5.72	1.60	6.31	14.42
Cost to Receipts Ratio (%)						
2001-2005 Average	73.97	72.79	102.80	89.50	75.33	84.82
Govt Payments/Receipts (%)						
2001-2005 Average	9.91	5.56	6.78	5.10	0.00	0.00
Total Cash Receipts ($1000)						
2000	586.66	1,997.65	494.34	3,374.23	798.76	29,538.27
2001	528.28	1,788.64	442.51	3,073.80	732.31	27,065.06
2002	483.11	1,563.11	391.82	2,710.68	632.58	23,345.09
2003	545.59	1,822.14	455.26	3,158.08	749.79	27,687.97
2004	580.61	1,977.64	493.30	3,417.95	819.27	30,263.66
2005	562.25	1,885.14	473.62	3,274.16	775.55	28,647.08
2001-2005 Average	539.96	1,807.33	451.30	3,126.93	741.90	27,401.77
Net Cash Farm Income ($1000)						
2000	217.35	784.28	87.35	829.24	262.87	7,320.66
2001	137.24	487.23	6.79	324.50	188.33	4,425.30
2002	107.22	304.60	-36.46	44.76	98.65	1,109.29
2003	149.28	541.51	3.98	421.00	201.71	5,011.64
2004	175.85	661.85	15.89	616.33	259.14	7,128.47
2005	158.68	560.63	-16.95	460.39	214.22	5,135.60
2001-2005 Average	145.65	511.16	-5.35	373.39	192.41	4,562.06
Prob. of a Cash Flow Deficit (%)						
2001	62	43	99	60	34	28
2002	55	61	99	77	50	49
2003	44	15	99	43	10	7
2004	38	13	99	33	3	2
2005	47	22	99	36	14	14
Ending Cash Reserves ($1000)						
2000	310.66	1,100.69	40.01	409.41	156.85	7,918.36
2001	300.46	1,152.16	-47.26	319.98	188.86	9,396.29
2002	293.18	1,141.51	-169.90	104.03	191.87	9,441.14
2003	296.16	1,299.49	-257.06	217.36	258.03	12,340.36
2004	320.71	1,497.96	-356.15	448.09	361.60	16,483.64
2005	323.03	1,664.75	-503.92	576.64	436.63	19,370.51
2001-2005 Average	306.71	1,351.18	-266.86	333.22	287.40	13,406.39
Nominal Net Worth ($1000)						
2000	1,219.56	5,147.09	1,538.59	4,949.93	961.39	17,418.21
2001	1,247.80	5,341.97	1,506.94	5,012.56	1,004.70	18,961.41
2002	1,226.48	5,283.96	1,361.98	4,652.18	972.17	17,796.12
2003	1,255.80	5,503.27	1,284.26	4,897.98	1,074.93	22,364.62
2004	1,313.89	5,809.83	1,216.09	5,223.34	1,200.04	27,471.50
2005	1,330.31	5,966.35	1,089.45	5,300.12	1,254.09	29,720.34
2001-2005 Average	1,274.86	5,581.08	1,291.74	5,017.24	1,101.19	23,262.80
Prob. of Losing Real Net Worth (%)						
2001	20	12	63	38	31	35
2002	30	21	98	68	43	47
2003	20	10	99	46	16	15
2004	13	3	98	30	6	5
2005	14	3	99	26	4	4

Figure 36. Hog Farms

Minimum Annual Percentage Change in Receipts, 2001-2005, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2001-2005, for all Hog Farms

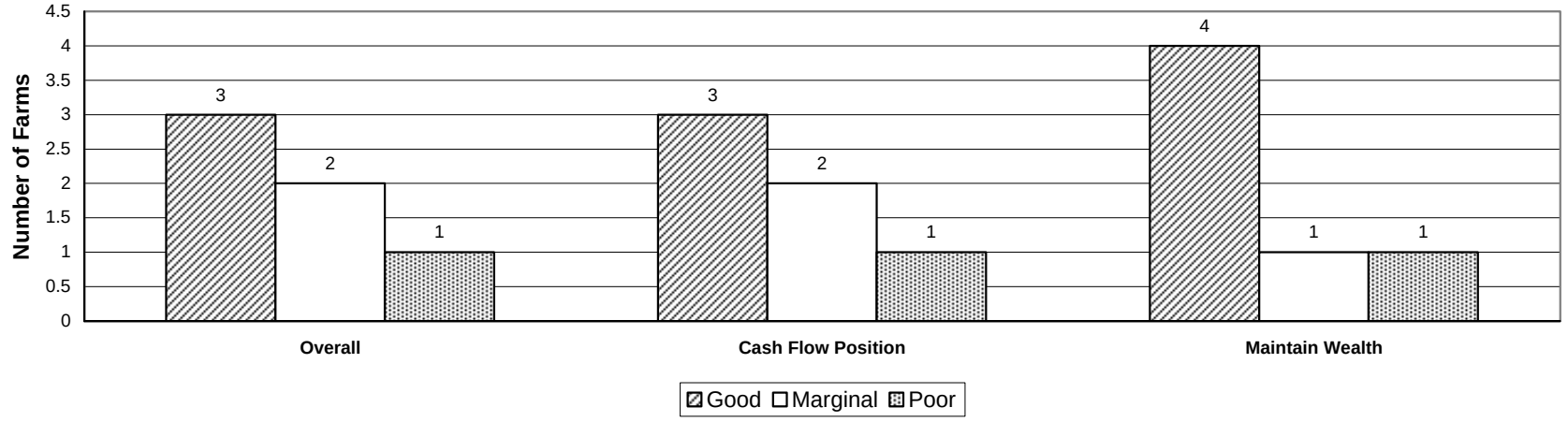


Figure 37. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Hog Farms

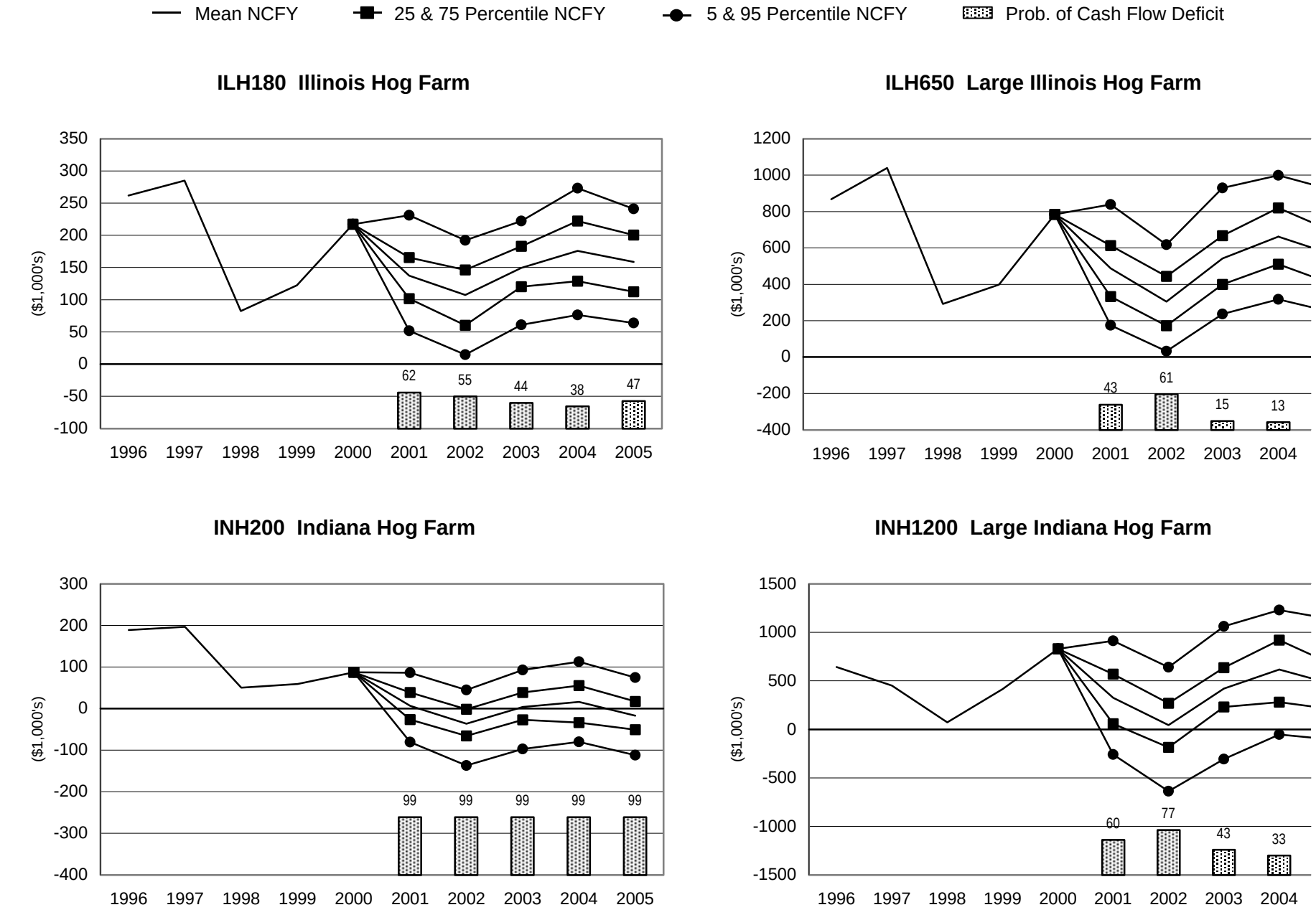
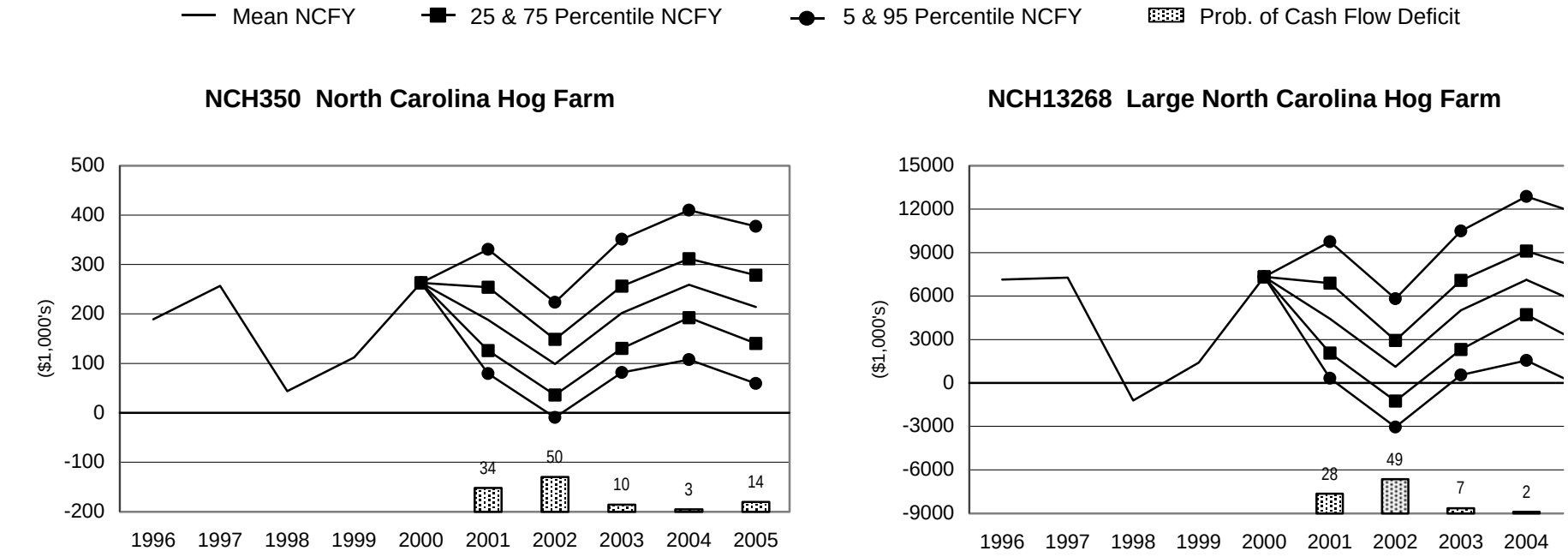


Figure 38. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Hog Farms



APPENDIX A:

CHARACTERISTICS OF REPRESENTATIVE FARMS

2000 CHARACTERISTICS OF PANEL FARMS PRODUCING FEED GRAIN AND OILSEEDS

IAG950 A 950-acre Northwestern Iowa (Webster County) moderate size grain farm that plants 475 acres of corn, and 475 acres of soybeans. The farm receives 57 percent of its receipts from corn.

IAG2400 A 2,400-acre Northwestern Iowa (Webster County) large grain farm that plants 1,200 acres of corn, and 1,200 acres of soybeans. The farm generates 59 percent of its receipts from corn.

NEG900 A 900-acre South Central Nebraska (York County) grain farm that plants 600 acres of corn, and 300 acres of soybeans. The farm generates 75 percent of its receipts from corn.

NEG1300 A 1,300 South Central Nebraska (Hamilton County) grain farm that plants 871 acres of corn and 429 acres of soybeans. The farm generates about 74 percent of its receipts from corn.

MOCG1700 A 1,700-acre Central Missouri (Carroll County) moderate size grain farm with 85 acres of wheat, 808 acres of corn, and 808 acres of soybeans. This farm is located in the Missouri river bottom and supplies feed to the livestock producers in the region at a premium to other areas of Missouri. Corn generates 56 percent of the farm's receipts and soybeans account for 39 percent of receipts.

MOCG3300 A 3,300-acre Central Missouri (Carroll County) large grain farm with 100 acres of wheat, 1,319 acres of corn, and 1,881 acres of soybeans. This farm is located in the Missouri river bottom-and supplies feed to the livestock producers in the region at a premium to other areas of Missouri. The farm generates about 48 percent of its total revenue from corn and 48 percent from soybeans.

MONG1400 A 1,400-acre Northern Missouri (Nodaway County) diversified grain farm with 600 acres of corn, 600 acres of soybeans, and 200 acres of hay. The farm also has 200 breeding cows and in 1996 sold its 80 breeding sows. The farm generates about 40 percent of its total revenue from corn, 27 percent from soybeans, and 30 percent from cattle.

Appendix Table A1. Characteristics of Panel Farms Producing Feed Grains for 2000.

	IAG950	IAG2400	NEG900	NEG1300	MOCG1700	MOCG3300	MONG1400
County	Webster	Webster	York	Hamilton	Carroll	Carroll	Nodaway
Total Cropland	950	2,400	900	1,300	1,700	3,300	1,400
Acres Owned	240	380	180	260	850	1,600	700
Acres Leased	710	2,020	720	1,040	850	1,700	700
Pastureland							
Acres Owned	0	0	0	0	0	0	400
Acres Leased	0	0	0	0	0	0	400
Assets ($1000)							
Total	1,209	2,109	1,336	1,576	2,527	4,349	2,107
Real Estate	905	1,358	714	809	1,744	3,198	1,502
Machinery	213	445	397	434	439	652	441
Other & Livestock	91	307	225	333	345	499	164
Debt/Asset Ratios							
Total	0.14	0.15	0.19	0.12	0.13	0.14	0.30
Intermediate	0.12	0.16	0.23	0.10	0.12	0.16	0.66
Long Run	0.14	0.14	0.16	0.15	0.14	0.14	0.15
Number of Livestock							
Beef Cows	0	0	0	0	0	0	200
2000 Gross Receipts ($1,000)*							
Total	282.9	624.6	343.8	482.5	362.2	718.3	386.9
Cattle	0.0	0.0	0.0	0.0	0.0	0.0	117.7
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.40%
Corn	161.2	367.9	259.0	356.5	201.8	343.4	156.1
	57.00%	58.90%	75.30%	73.90%	55.70%	47.80%	40.30%
Wheat	0.0	0.0	0.0	0.0	16.0	30.0	0.0
	0.00%	0.00%	0.00%	0.00%	4.40%	4.20%	0.00%
Soybeans	119.7	256.7	84.8	125.9	139.4	344.9	105.8
	42.30%	41.10%	24.70%	26.10%	38.50%	48.00%	27.40%
Hay	0.0	0.0	0.0	0.0	0.0	0.0	3.5
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.90%
Other Receipts	2.0	0.0	0.0	0.0	5.0	0.0	3.8
	0.70%	0.00%	0.00%	0.00%	1.40%	0.00%	1.00%
2000 Planted Acres**							
Total	950.0	2,400.0	900.0	1,300.0	1,700.0	3,300.0	1,450.0
Corn	475.0	1,200.0	600.0	871.0	807.5	1,319.0	600.0
	50.00%	50.00%	66.70%	67.00%	47.50%	40.00%	41.40%
Wheat	0.0	0.0	0.0	0.0	85.0	100.0	0.0
	0.00%	0.00%	0.00%	0.00%	5.00%	3.00%	0.00%
Soybeans	475.0	1,200.0	300.0	429.0	807.5	1,881.0	600.0
	50.00%	50.00%	33.30%	33.00%	47.50%	57.00%	41.40%
Hay	0.0	0.0	0.0	0.0	0.0	0.0	200.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.80%
CRP	0.0	0.0	0.0	0.0	0.0	0.0	50.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.40%

*Receipts for 2000 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2000 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

PANEL FARMS PRODUCING FEED GRAIN AND OILSEEDS (CONTINUED)

TXNP1600 A 1,600-acre Northern High Plains of Texas (Moore County) moderate size, 100 percent irrigated, grain farm with 528 acres of wheat, 240 acres of sorghum, 800 acres of corn, and 32 acres fallow. The farm generates 82 percent of its total receipts from feed grains.

TXNP6700 A 6,700-acre Northern High Plains of Texas (Moore County) large, 80 percent irrigated, grain farm with 1,675 acres of irrigated wheat (670 acres of the wheat is in the dryland corners of all pivot irrigated fields), 335 acres of irrigated sorghum, 3,350 acres of irrigated corn, 670 acres of irrigated soybeans, and 670 acres fallow. The farm generates about 80 percent of its receipts from feed grains.

TXBG2000 A 2,000 acre Texas Blacklands (Hill County) grain farm with 600 acres of corn, 750 acres of sorghum, 250 acres of wheat, 400 acres of cotton and 150 acres of pasture. About 66 percent of the receipts are from feedgrains. The farm has 20 cows and receives only 3 percent of its receipts from cattle.

TXBG2500 A 2,500 acre Texas Blacklands (Falls County) grain farm with 750 acres of corn, 250 acres of sorghum, 250 acres of wheat, and 625 acres of oats. The feedgrains account for 62 percent of the receipts on the farm.

TNG900 A 900-acre Western Tennessee (Henry County) grain and soybean farm with 400 acres of corn, 500 acres of soybeans, 200 acres of wheat, and 250 acres of hay. The farm generates about 78 percent of its receipts from corn and soybeans. Fifty head of beef cattle account for 8 percent of receipts.

TNG2400 A 2,400-acre Western Tennessee (Henry County) grain and soybean farm with 1,200 acres of corn, 1,200 acres of soybeans, and 600 acres of wheat. The farm generates about 87 percent of its receipts from corn and soybeans.

SCG1500 A 1,500-acre South Carolina (Clarendon County) moderate size grain farm with 454 acres of double cropped wheat and soybeans, 846 acres of corn, and 654 acres of soybeans. The farm generates about 84 percent of its total receipts from corn and soybeans. This farm enjoys high returns on double-cropped acreage but timing does not allow more than 454 acres.

SCG3500 A 3,500-acre South Carolina (Clarendon County) large grain farm with 900 acres of double crop wheat and soybeans, 1260 acres of soybeans, 840 acres of cotton, and 1,400 acres of corn. This farm enjoys high returns on double-cropped acreage but timing is a limiting factor. The farm generates 48 percent of its receipts from corn and soybeans.

Appendix Table A2. Characteristics of Panel Farms Producing Feed Grains for 2000.

	TXNP1600	TXNP6700	TXBG2000	TXBG2500	TNG900	TNG2400	SCG1500	SCG3500
County	Moore	Moore	Hill	Falls	Henry	Henry	Clarendon	Clarendon
Total Cropland	1,600	6,700	2,000	1,250	900	2,400	1,500	3,500
Acres Owned	160	1,100	200	312	207	482	500	1,400
Acres Leased	1,440	5,600	1,800	938	693	1,918	1,000	2,100
Pastureland								
Acres Owned	0	0	15	312	57	0	300	1,400
Acres Leased	0	0	135	700	190	0	0	0
Assets ($1000)								
Total	522	2,914	567	1,152	700	1,103	1,063	3,923
Real Estate	128	896	324	804	409	138	717	2,551
Machinery	290	1,366	231	132	219	686	311	919
Other & Livestock	104	651	13	216	72	279	35	454
Debt/Asset Ratios								
Total	0.17	0.15	0.31	0.10	0.28	0.37	0.14	0.17
Intermediate	0.18	0.16	0.60	0.03	0.52	0.30	0.13	0.20
Long Run	0.15	0.12	0.09	0.13	0.14	0.66	0.15	0.15
Number of Livestock								
Beef Cows	0	0	20	20	50	0	0	0
2000 Gross Receipts ($1,000)*								
Total	428.6	1,737.8	309.5	307.1	278.2	704.8	490.2	1,550.5
Cattle	0.0	0.0	8.4	7.0	22.7	0.0	0.0	0.0
	0.00%	0.00%	2.70%	2.30%	8.20%	0.00%	0.00%	0.00%
Corn	292.5	1,299.9	104.7	151.6	100.5	344.1	270.5	518.2
	68.30%	74.80%	33.80%	49.40%	36.10%	48.80%	55.20%	33.40%
Sorghum	56.7	78.6	98.4	38.5	0.0	0.0	0.0	0.0
	13.20%	4.50%	31.80%	12.50%	0.00%	0.00%	0.00%	0.00%
Wheat	79.4	205.5	26.1	36.9	24.2	90.7	81.0	236.4
	18.50%	11.80%	8.40%	12.00%	8.70%	12.90%	16.50%	15.20%
Soybeans	0.0	138.7	0.0	0.0	115.4	270.0	138.7	224.2
	0.00%	8.00%	0.00%	0.00%	41.50%	38.30%	28.30%	14.50%
Cotton	0.0	0.0	72.0	0.0	0.0	0.0	0.0	571.7
	0.00%	0.00%	23.30%	0.00%	0.00%	0.00%	0.00%	36.90%
Hay	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	0.00%	0.00%
Oats	0.0	0.0	0.0	24.4	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	8.00%	0.00%	0.00%	0.00%	0.00%
Other Receipts	0.0	15.0	0.0	48.7	9.7	6.2	2.0	5.8
	0.00%	0.90%	0.00%	15.90%	3.50%	0.90%	0.40%	0.40%
2000 Planted Acres**								
Total	1,568.0	6,030.0	2,150.0	1,875.0	1,350.0	3,000.0	1,954.0	4,400.0
Corn	800.0	3,350.0	600.0	750.0	400.0	1,200.0	846.0	1,400.0
	51.00%	55.60%	27.90%	40.00%	29.60%	40.00%	43.30%	31.80%
Sorghum	240.0	335.0	750.0	250.0	0.0	0.0	0.0	0.0
	15.30%	5.60%	34.90%	13.30%	0.00%	0.00%	0.00%	0.00%
Wheat	528.0	1,675.0	250.0	250.0	200.0	600.0	454.0	900.0
	33.70%	27.80%	11.60%	13.30%	14.80%	20.00%	23.20%	20.50%
Soybeans	0.0	670.0	0.0	0.0	500.0	1,200.0	654.0	1,260.0
	0.00%	11.10%	0.00%	0.00%	37.00%	40.00%	33.50%	28.60%
Cotton	0.0	0.0	400.0	0.0	0.0	0.0	0.0	840.0
	0.00%	0.00%	18.60%	0.00%	0.00%	0.00%	0.00%	19.10%
Hay	0.0	0.0	0.0	0.0	250.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	18.50%	0.00%	0.00%	0.00%
Oats	0.0	0.0	0.0	625.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	33.30%	0.00%	0.00%	0.00%	0.00%
Improved Pasture	0.0	0.0	150.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	7.00%	0.00%	0.00%	0.00%	0.00%	0.00%

*Receipts for 2000 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2000 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2000 CHARACTERISTICS OF PANEL FARMS PRODUCING WHEAT

WAW1500 A 1,500-acre Southeastern Washington (Whitman County) moderate size grain farm that plants 900 acres of wheat, 300 acres of barley, and 300 acres of dry peas. Disease problems require a rotation that includes a minimum amount of barley and peas to maintain wheat yields. The farm generates 74 percent of its receipts from wheat.

WAW4250 A 4,250-acre Southeastern Washington (Whitman County) large size grain farm that is harvesting 2,763 acres of wheat, 200 acres of barley, and 1,282 acres of peas. Disease problems require a rotation that includes a minimum amount of barley and peas in order to maintain wheat yields. Winter and spring wheat account for 78 percent of receipts.

NDW1760 A 1,760-acre South Central North Dakota (Barnes County) moderate size grain farm that has 704 acres of wheat, 176 acres of barley, 176 acres of corn, 352 acres of soybeans, and 352 acres of sunflowers. The farm receives about 49 percent of receipts from small grains of wheat and barley and about 20 percent from sunflowers.

NDW4850 A 4,850-acre South Central North Dakota (Barnes County) large grain farm that plants 2,585 acres of wheat, 470 acres of barley, 705 acres of soybeans, 940 acres of sunflowers, and 150 acres of CRP. Wheat accounts for about 50 percent of the farms total gross receipts with soybeans contributing 38 percent.

KSSW1385 A 1,385-acre South Central Kansas (Sumner County) moderate size grain farm that plants 928 acres of wheat, 138 acres of soybeans, and 319 acres of grain-sorghum. The farm generates about 67 percent of its receipts from wheat and 22 percent from sorghum.

KSSW3180 A 3,180-acre South Central Kansas (Sumner County) large grain farm harvesting 2,258 acres of wheat, 652 acres of grain sorghum, 56 acres of corn, 87 acres of soybeans, and 127 acres of hay. The farm also has 67 mother cows. The farm generates 69 percent of its receipts from wheat.

KSNW2325 A 2,325-acre North Western Kansas (Thomas County) moderate size grain farm that plants 775 acres of wheat, 155 acres of grain sorghum, 620 acres of corn, and has 775 acres of fallow. The farm generates 40 percent of its receipts from wheat and 41 percent from corn.

KSNW4300 A 4,300-acre North Western Kansas (Thomas County) large grain farm harvesting 1,948 acres of wheat, 465 acres of sorghum, 549 acres of corn, 262 acres of sunflowers, 75 acres of hay, and 1,001 acres of fallow. The farm also has 100 breeding cows. The farm generates about 45 percent of its receipts from wheat and 28 percent from corn.

COW2700 A 2,700-acre Northeast Colorado (Washington County) moderate size grain farm that plants 1,127 acres of wheat, 608 acres of millet, and 446 acres of corn, and will leave 519 acres fallow. The farm generates 43 percent of its receipts from wheat and 38 percent from millet.

COW5440 A 5,440-acre Northeast Colorado (Washington County) large size grain farm that plants 1,900 acres of wheat, 500 acres of corn, 1,300 acres of millet, 640 acres of CRP, and 1,100 acres in fallow. Wheat produces 44 percent of the farms gross revenue while millet produces 40 percent.

Appendix Table A3. Characteristics of Panel Farms Producing Wheat for 2000.

	WAW1500	WAW4250	NDW1760	NDW4850	KSSW1385	KSSW3180	KSNW2325	KSNW4300	COW2700	COW5440
County	Whitman	Whitman	Barnes	Barnes	Sumner	Sumner	Thomas	Thomas	Washington	Washington
Total Cropland	1,500	4,250	1,760	4,850	1,385	3,180	2,325	4,300	2,700	5,440
Acres Owned	750	2,125	176	1,701	485	330	930	1,147	837	3,020
Acres Leased	750	2,125	1,584	3,149	900	2,850	1,395	3,153	1,863	2,420
Pastureland										
Acres Owned	0	0	0	0	0	25	500	500	0	0
Acres Leased	0	0	0	0	0	775	500	500	0	0
Assets ($1000)										
Total	1,544	4,431	399	2,237	601	1,381	586	901	767	2,282
Real Estate	1,063	3,253	132	1,029	311	405	181	187	444	1,578
Machinery	476	982	201	882	202	465	326	465	223	500
Other & Livestock	6	196	66	326	88	511	79	250	100	204
Debt/Asset Ratios										
Total	0.24	0.15	0.11	0.15	0.22	0.09	0.36	0.24	0.17	0.14
Intermediate	0.46	0.24	0.09	0.15	0.24	0.06	0.26	0.11	0.23	0.15
Long Run	0.15	0.12	0.15	0.15	0.20	0.18	0.57	0.69	0.14	0.13
Number of Livestock										
Beef Cows	0	0	0	0	0	67	0	100	0	0
2000 Gross Receipts ($1,000)*										
Total	351.1	937.4	253.5	778.4	157.8	406.2	227.8	490.1	174.1	395.9
Cattle	0.0	0.0	0.0	0.0	0.0	33.4	0.0	43.2	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	8.20%	0.00%	8.80%	0.00%	0.00%
Wheat	258.6	728.7	97.7	385.4	105.7	278.7	91.4	220.6	77.7	181.2
	73.70%	77.70%	38.50%	49.50%	67.00%	68.60%	40.10%	45.00%	44.60%	45.80%
Sorghum	0.0	0.0	0.0	0.0	35.2	65.3	24.4	56.9	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	22.30%	16.10%	10.70%	11.60%	0.00%	0.00%
Barley	53.3	42.7	27.6	85.8	0.0	0.0	0.0	0.0	0.0	0.0
	15.20%	4.60%	10.90%	11.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Corn	0.0	0.0	22.4	0.0	0.0	6.2	94.0	138.8	28.2	34.0
	0.00%	0.00%	8.80%	0.00%	0.00%	1.50%	41.30%	28.30%	16.20%	8.60%
Soybeans	0.0	0.0	55.9	297.9	16.9	11.2	0.0	0.0	0.0	0.0
	0.00%	0.00%	22.00%	38.30%	10.70%	2.80%	0.00%	0.00%	0.00%	0.00%
Dry Peas	39.1	166.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	11.10%	17.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sunflowers	0.0	0.0	50.0	0.0	0.0	0.0	0.0	29.1	0.0	0.0
	0.00%	0.00%	19.70%	0.00%	0.00%	0.00%	0.00%	5.90%	0.00%	0.00%
Millet	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0	157.4
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	36.70%	39.80%
Hay	0.0	0.0	0.0	0.0	0.0	11.4	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	2.80%	0.00%	0.00%	0.00%	0.00%
Other Receipts	0.0	0.0	0.0	6.6	0.0	0.0	18.0	1.5	4.3	23.4
	0.00%	0.00%	0.00%	0.90%	0.00%	0.00%	7.90%	0.30%	2.40%	5.90%
2000 Planted Acres**										
Total	1,500.0	4,244.0	1,760.0	4,700.0	1,385.0	3,180.0	2,325.0	4,300.0	2,181.0	4,340.0
Wheat	900.0	2,762.5	704.0	2,585.0	928.0	2,258.0	775.0	1,948.0	1,127.0	1,900.0
	60.00%	65.10%	40.00%	55.00%	67.00%	71.00%	33.30%	45.30%	51.70%	43.80%
Sorghum	0.0	0.0	0.0	0.0	319.0	652.0	155.0	465.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	23.00%	20.50%	6.70%	10.80%	0.00%	0.00%
Barley	300.0	200.0	176.0	470.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.00%	4.70%	10.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Corn	0.0	0.0	176.0	0.0	0.0	56.0	620.0	549.0	446.0	500.0
	0.00%	0.00%	10.00%	0.00%	0.00%	1.80%	26.70%	12.80%	20.40%	11.50%
Soybeans	0.0	0.0	352.0	1,645.0	138.0	87.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	20.00%	35.00%	10.00%	2.70%	0.00%	0.00%	0.00%	0.00%
Dry Peas	300.0	1,281.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20.00%	30.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sunflowers	0.0	0.0	352.0	0.0	0.0	0.0	0.0	262.0	0.0	0.0
	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	6.10%	0.00%	0.00%
Millet	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	608.0	1,300.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	27.90%	30.00%
Hay	0.0	0.0	0.0	0.0	0.0	127.0	0.0	75.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00%	1.70%	0.00%	0.00%
Fallow	0.0	0.0	0.0	0.0	0.0	0.0	775.0	1,001.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.30%	23.30%	0.00%	0.00%
CRP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	640.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.70%

*Receipts for 2000 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

2000 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

CAC2000 A 2,000-acre Central San Joaquin Valley California (Kings County) moderate size cotton farm that plants 600 acres of cotton, 600 acres of wheat, 400 acres of corn, and 600 acres of hay. The farm generates 45 percent of its gross income from cotton and 36 percent from hay.

CAC6000 A 6,000-acre Central San Joaquin Valley California (Kings County) large cotton farm harvesting 2,400 acres of cotton, 2,100 acres of vegetables and almonds, 600 acres of wheat, 300 acres of corn, and 600 acres of hay. Vegetables on this farm vary from year to year depending on the price of the various vegetables, however, the returns to this 2,100 acres remain relatively stable over time. Cotton generates about 36 percent of this farm's receipts while the vegetables generate about 53 percent.

TXSP1682 A 1,682-acre Texas Southern High Plains (Dawson County) moderate size cotton farm plants 1,185 acres of cotton (866 dryland and 319 irrigated), 196 acres of peanuts, and has 183 acres in CRP. The farm generates 54 percent of its receipts from cotton and 42 percent from peanuts.

TXSP3697 A 3,697-acre Texas Southern High Plains (Dawson County) large cotton farm plants 2,665 acres of cotton (2,095 dryland and 570 irrigated), 285 acres of peanuts, and has 214 acres in CRP. Cotton generates 65 percent of this farm’s receipts while peanuts generate about 34 percent.

TXRP2500 A 2,500-acre Texas Rolling Plains (Jones County) cotton farm that plants 1,240 acres of cotton, and 825 acres of wheat. About 80 percent of this farm’s receipts are derived from cotton.

TXBC1400 A 1,400-acre Texas Blacklands (Williamson County) moderate size cotton and grain farm has 350 acres of cotton, 400 acres of sorghum, 550 acres of corn, and 100 acres of wheat. This farm also has 50 breeding cows that are pastured on rented land that cannot be cropped. Cotton generates 39 percent of the farm's receipts and corn generates 30 percent.

TXCB1720 A 1,720-acre Texas Coastal Bend (San Patricio County) cotton farm has 700 acres of cotton, 870 acres of grain sorghum and 150 acres of corn. About 61 percent of the receipts are cotton receipts.

TNC1675 A 1,675-acre Southwest Tennessee (Fayette County) cotton farm has 838 acres of cotton, 670 acres of soybeans, and 168 acres of corn. The farm generates about 70 percent of its cash receipts from cotton.

TNC3800 A 3,800-acre Southwest Tennessee (Haywood County) cotton farm has 2,508 acres of cotton, 760 acres of soybeans, 300 acres of wheat, and 532 acres of corn. The farm generates about 79 percent of its cash receipts from cotton.

Appendix Table A4. Characteristics of Panel Farms Producing Cotton for 2000.

	CAC2000	CAC6000	TXSP1682	TXSP3697	TXRP2500	TXBC1400	TXCB1720	TNC1675	TNC3800
County	Kings	Kings	Dawson	Dawson	Jones	Williamson	San Patricio	Fayette	Haywood
Total Cropland	2,000	6,000	1,682	3,697	2,500	1,400	1,720	1,675	3,800
Acres Owned	1,000	4,800	606	1,627	400	150	360	225	1,520
Acres Leased	1,000	1,200	1,076	2,070	2,100	1,250	1,360	1,450	2,280
Pastureland									
Acres Owned	0	0	0	0	0	30	50	0	0
Acres Leased	0	0	0	0	500	210	0	0	0
Assets ($1000)									
Total	4,123	14,623	737	1,664	333	569	922	1,030	8,432
Real Estate	3,397	14,616	333	969	176	279	460	527	6,929
Machinery	468	7	404	696	141	195	280	317	1,287
Other & Livestock	258	0	0	0	16	96	182	185	216
Debt/Asset Ratios									
Total	0.16	0.17	0.51	0.25	0.36	0.11	0.07	0.31	0.10
Intermediate	0.18	80.32	0.81	0.46	0.60	0.04	0.04	0.73	0.31
Long Run	0.16	0.13	0.14	0.11	0.15	0.18	0.10	0.12	0.06
Number of Livestock									
Beef Cows	0	0	0	0	12	50	0	0	0
2000 Gross Receipts ($1,000)*									
Total	1,510.9	7,712.1	410.5	630.3	246.2	252.8	344.9	581.7	1,355.6
Cattle	0.0	0.0	0.0	0.0	4.3	19.8	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	1.70%	7.80%	0.00%	0.00%	0.00%
Cotton	679.8	2,791.5	221.3	411.6	194.7	98.1	208.7	407.7	1,066.7
	45.00%	36.20%	53.90%	65.30%	79.10%	38.80%	60.50%	70.10%	78.70%
Sorghum	0.0	0.0	0.0	0.0	0.0	47.4	118.5	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	18.70%	34.40%	0.00%	0.00%
Wheat	160.3	293.4	0.0	0.0	47.2	8.7	1.2	0.0	50.5
	10.60%	3.80%	0.00%	0.00%	19.20%	3.40%	0.30%	0.00%	3.70%
Soybeans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.6	112.2
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	21.90%	8.30%
Corn	122.6	96.1	0.0	0.0	0.0	76.8	16.6	46.4	119.2
	8.10%	1.20%	0.00%	0.00%	0.00%	30.40%	4.80%	8.00%	8.80%
Hay	548.2	477.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	36.30%	6.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Quota Peanuts	0.0	0.0	68.4	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	16.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Additional Peanuts	0.0	0.0	105.2	211.7	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	25.60%	33.60%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Receipts	0.0	4,053.2	15.6	7.1	0.0	2.0	0.0	15.2	10.6
	0.00%	52.60%	3.80%	1.10%	0.00%	0.80%	0.00%	2.60%	0.80%
2000 Planted Acres**									
Total	2,200.0	6,000.0	1,564.0	3,164.0	2,065.0	1,400.0	1,720.0	1,675.0	4,100.0
Cotton	600.0	2,400.0	1,185.0	2,665.0	1,240.0	350.0	700.0	837.5	2,508.0
	27.30%	40.00%	75.80%	84.20%	60.00%	25.00%	40.70%	50.00%	61.20%
Sorghum	0.0	0.0	0.0	0.0	0.0	400.0	870.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	28.60%	50.60%	0.00%	0.00%
Wheat	400.0	600.0	0.0	0.0	825.0	100.0	0.0	0.0	300.0
	18.20%	10.00%	0.00%	0.00%	40.00%	7.10%	0.00%	0.00%	7.30%
Soybeans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	670.0	760.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	40.00%	18.50%
Corn	200.0	300.0	0.0	0.0	0.0	550.0	150.0	167.5	532.0
	9.10%	5.00%	0.00%	0.00%	0.00%	39.30%	8.70%	10.00%	13.00%
Hay	1,000.0	600.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	45.50%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Quota Peanuts	0.0	0.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	4.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Additional Peanuts	0.0	0.0	131.0	285.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	8.40%	9.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Vegetables	0.0	2,100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	35.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CRP	0.0	0.0	183.0	214.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	11.70%	6.80%	0.00%	0.00%	0.00%	0.00%	0.00%

*Receipts for 2000 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2000 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2000 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

CAR424 A 424-acre Sacramento Valley California (Sutter and Yuba Counties) moderate size rice farm that plants 400 acres of rice. The farm generates 95 percent of its gross income from rice.

CAR1365 A 1,365-acre Sacramento Valley California (Sutter and Yuba Counties) large rice farm that plants 1,265 acres of rice. The farm generates about 98 percent of its gross income from rice.

TXR2118 A 2,118-acre West of Houston, Texas (Wharton County) moderate size rice farm that harvests 600 acres of first crop rice, and 510 acres of ratoon rice. The farm receives 99 percent of its gross receipts from rice.

TXR3750 A 3,750-acre West of Houston, Texas (Wharton County) large rice farm that harvests 1,500 acres of first-crop rice, 1,275 acres of ratoon rice, and 200 acres of hay. The farm also has 200 breeding cows. About 95 percent of the farm's gross receipts are from rice.

MOER4000 A 4,000-acre Southeastern Missouri (Stoddard County) large size rice farm with 1,334 acres of rice, 1,333 acres of soybeans and 1,333 acres of corn. This farm lies on the Southern bootheel of Missouri. Rice accounts for 46 percent of this farm’s receipts while corn accounts for about 33 percent.

MOWR4000 A 4,000-acre Southeastern Missouri (Butler County) large rice farm with 2,000 acres of rice and 2,000 acres soybeans. This farm lies on the Southern bootheel of Missouri. About 76 percent of this farm’s receipts are generated from rice and 24 percent are generated from soybeans.

ARR3640 A 3,640-acre Arkansas (Arkansas County) large size rice farm with 122 acres of medium grain rice, 1620 acres of long grain rice, 883 acres of soybeans, and 615 acres of double cropped wheat and soybeans. About 72 percent of the farm’s receipts come from rice.

LAR1100 A 1,100-acre Louisiana (Jefferson Davis, Acadia, and Vermilion Parishes) moderate size rice farm harvesting 189 acres of medium grain rice, 351 acres of long grain rice, 362 acres of soybeans, and 198 acres of fallow. About 85 percent of this farm's receipts are generated by rice.

Appendix Table A5. Characteristics of Panel Farms Producing Rice for 2000.

	CAR424	CAR1365	TXR2118	TXR3750	MOER4000	MOWR4000	ARR3640	LAR1100
County	Sutter	Sutter	Wharton	Wharton	Stoddard	Butler	Arkansas	Acadia
Total Cropland	424	1,365	2,118	3,750	4,000	4,000	3,640	1,100
Acres Owned	212	515	318	1,688	1,400	2,000	1,456	50
Acres Leased	212	850	1,800	2,062	2,600	2,000	2,184	1,050
Pastureland								
Acres Owned	0	0	0	200	0	0	0	0
Assets ($1000)								
Total	847	2,156	790	2,715	5,434	7,497	5,393	416
Real Estate	522	1,559	230	1,327	3,034	3,985	2,816	87
Machinery	298	485	262	653	1,099	1,434	1,000	329
Other & Livestock	27	112	299	735	1,301	2,079	1,577	0
Debt/Asset Ratios								
Total	0.24	0.15	0.10	0.14	0.14	0.14	0.08	0.55
Intermediate	0.39	0.14	0.09	0.14	0.06	0.13	0.05	0.66
Long Run	0.15	0.15	0.14	0.14	0.21	0.16	0.10	0.14
Number of Livestock								
Beef Cows	0	0	0	200	0	0	0	0
2000 Gross Receipts ($1,000)*								
Total	358.7	1,103.8	510.4	1,454.8	1,494.0	1,959.7	1,565.3	305.3
Cattle	0.0	0.0	0.0	58.3	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	4.00%	0.00%	0.00%	0.00%	0.00%
Rice	340.4	1,084.2	503.4	1,376.4	692.1	1,493.1	1,118.4	258.9
	94.90%	98.20%	98.60%	94.60%	46.30%	76.20%	71.50%	84.80%
Soybeans	0.0	0.0	0.0	0.0	305.4	466.6	320.1	43.4
	0.00%	0.00%	0.00%	0.00%	20.40%	23.80%	20.40%	14.20%
Corn	0.0	0.0	0.0	0.0	496.5	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	33.20%	0.00%	0.00%	0.00%
Wheat	0.0	0.0	0.0	0.0	0.0	0.0	126.8	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.10%	0.00%
Cotton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Receipts	18.3	19.6	7.0	20.0	0.0	0.0	0.0	3.0
	5.10%	1.80%	1.40%	1.40%	0.00%	0.00%	0.00%	1.00%
2000 Planted Acres**								
Total	400.0	1,265.0	1,110.2	2,975.0	4,000.0	4,000.0	3,855.0	901.9
Rice	400.0	1,265.0	1,110.2	2,775.0	1,334.0	2,000.0	1,742.0	540.0
	100.00%	100.00%	100.00%	93.30%	33.30%	50.00%	45.20%	59.90%
Soybeans	0.0	0.0	0.0	0.0	1,333.0	2,000.0	1,498.0	361.9
	0.00%	0.00%	0.00%	0.00%	33.30%	50.00%	38.90%	40.10%
Corn	0.0	0.0	0.0	0.0	1,333.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	33.30%	0.00%	0.00%	0.00%
Wheat	0.0	0.0	0.0	0.0	0.0	0.0	615.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.00%	0.00%
Cotton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hay	0.0	0.0	0.0	200.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	6.70%	0.00%	0.00%	0.00%	0.00%

*Receipts for 2000 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2000 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2000 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK

CAD1710 A 1,710-cow Central California (Tulare County) large dairy farm that produces 23,141 pounds of milk per cow. The farm plants 200 acres of hay, and 325 acres of silage for which it employs custom harvesting. Milk receipts generate 92 percent of all receipts.

NMD2000 A 2,000-cow Southern New Mexico (Dona Anna and Chaves County) large dairy farm that averages 21,154 pounds per cow. Rather than plant any crops, this farm purchased all commodities necessary for blending its own total mixed ration. Milk sales account for 93 percent of cash receipts.

WAD185 A 185-cow Northern Washington (Whatcom County) moderate size dairy farm that produces 24,259 pounds of milk per cow. The farm plants 115 acres of silage and generates 94 percent of its receipts from milk.

WAD900 A 900-cow Northern Washington (Whatcom County) large dairy farm that produces 24,811 pounds of milk per cow. The farm plants 605 acres of silage and generates 92 percent of its receipts from milk.

IDD750 A 750-cow Idaho (Twin Falls County) moderate size dairy farm that produces 22,665 pounds of milk per cow. The farm plants no crops. Milk is 87 percent of the farms gross income.

IDD2100 A 2,100-cow Idaho (Twin Falls County) large dairy farm that produces 23,181 pounds of milk per cow. The farm plants 160 acres of hay and 400 acres of silage. Milk is 90 percent of the farms gross income.

TXCD400 A 400-cow Central Texas (Erath County) moderate size dairy farm that produces 18,539 pounds of milk per cow. The farm plants 330 acres of hay. Milk is 90 percent of the farms gross income.

TXCD825 A 825-cow Central Texas (Erath County) large dairy farm that produces 21,119 pounds of milk per cow. The farm plants 430 acres for silage, 20 acres of haylage, and milk accounts for 92 percent of receipts.

TXED310 A 310-cow East Texas (Hopkins County) moderate size dairy farm that produces 17,925 pounds of milk per cow. The farm has 60 acres of improved pasture, plants 260 acres of hay and forage, and generates 95 percent of its receipts from milk.

TXED750 A 750-cow East Texas (Lamar County) large dairy farm that produces 18,044 pounds of milk per cow. The farm plants 400 acres of hay and 500 acres of silage. The farm generates 93 percent of its receipts from milk.

Appendix Table A6. Characteristics of Panel Farms Producing Milk for 2000.

	CAD1710	NMD2000	WAD185	WAD900	IDD750	IDD2100	TXCD400	TXCD825	TXED310	TXED750
County	Tulare	Dona Ana	Whatcom	Whatcom	Twin Falls	Twin Falls	Erath	Erath	Hopkins	Lamar
Total Cropland	800	300	120	605	120	620	165	460	420	900
Acres Owned	800	300	60	300	120	620	165	460	210	900
Acres Leased	0	0	60	305	0	0	0	0	210	0
Pastureland										
Acres Leased	0	0	0	0	0	0	0	0	0	80
Assets ($1000)										
Total	11,479	6,663	1,269	4,713	3,476	12,054	1,548	4,707	1,130	3,423
Real Estate	6,495	3,199	497	2,558	1,401	4,426	824	1,634	423	1,451
Machinery	282	384	88	518	263	490	146	334	98	442
Other & Livestock	4,701	3,080	684	1,636	1,812	7,138	578	2,739	609	1,531
Debt/Asset Ratios										
Total	0.14	0.14	0.13	0.15	0.08	0.07	0.59	0.11	0.22	0.12
Intermediate	0.03	0.09	0.04	0.07	0.04	0.03	0.98	0.04	0.22	0.06
Long Run	0.22	0.20	0.27	0.22	0.13	0.13	0.25	0.25	0.23	0.22
2000 Gross Receipts ($1,000)*										
Total	4,861.3	5,783.0	636.7	3,019.8	2,078.5	5,753.3	1,037.2	3,503.4	762.2	1,904.0
Milk	4,486.2	5,354.5	598.1	2,762.1	1,803.4	5,164.5	931.3	3,235.0	723.5	1,762.0
	92.30%	92.60%	93.90%	91.50%	86.80%	89.80%	89.80%	92.30%	94.90%	92.50%
Dairy Cattle	375.2	428.5	38.6	257.7	275.1	588.8	69.9	268.4	38.7	142.0
	7.70%	7.40%	6.10%	8.50%	13.20%	10.20%	6.70%	7.70%	5.10%	7.50%
Hay	0.0	0.0	0.0	0.0	0.0	0.0	36.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.50%	0.00%	0.00%	0.00%
2000 Planted Acres**										
Total	525.0	0.0	115.0	605.0	0.0	560.0	330.0	450.0	320.0	900.0
Hay	525.0	0.0	115.0	605.0	0.0	0.0	330.0	450.0	260.0	900.0
	100.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	100.00%	81.30%	100.00%
Silage	0.0	0.0	0.0	0.0	0.0	560.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
Improved Pasture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.80%	0.00%

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**Acreages for 2000 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2000 CHARACTERISTICS OF PANEL FARM PRODUCING MILK (CONTINUED)

WID70 A 70-cow Eastern Wisconsin (Winnebago County) moderate size dairy farm that produces 23,200 pounds of milk per cow. The farm plants 37 acres of hay, 55 acres of corn, 24 acres of silage, 40 acres of soybeans, and 89 acres of haylage. Milk makes up 89 percent of this farm's receipts.

WID600 A 600-cow Eastern Wisconsin (Winnebago County) large dairy farm that produces 22,229 pounds of milk per cow. The farm plants 280 acres of hay, 378 acres of silage, and 343 acres of haylage. Milk accounts for 93 percent of the farm's receipts.

MIED200 A 200-cow Michigan (Sanilac County) moderate size dairy farm that produces 23,350 pounds of milk per cow. The farm plants 220 acres of corn, 50 acres of wheat, 150 acres of haylage, and 170 acres of silage. Milk accounts for 92 percent of the farm's receipts.

MICD140 A 140-cow Michigan (Isabella County) moderate size dairy farm that produces 21,584 pounds of milk per cow. The farm plants 175 acres of corn, 70 acres of hay, 65 acres of silage, 70 acres of wheat, and 110 acres of haylage. Milk accounts for 85 percent of the farm's receipts.

NYWD800 A 800-cow Western New York (Wyoming County) moderate size dairy farm that produces 23,040 pounds of milk per cow. The farm plants 575 acres of silage and 625 acres of haylage. About 94 percent of the farm's receipts come from milk.

NYWD1200 A 1,200-cow Western New York (Wyoming County) large dairy farm that produces 23,000 pounds of milk per cow. The farm plants 825 acres of silage and 700 acres of haylage. Milk accounts for 95 percent of the farm's receipts.

NYCD110 A 110-cow Central New York (Cayuga County) moderate size dairy farm that produces 23,350 pounds of milk per cow. The farm plants 80 acres of hay, 64 acres of corn, and 131 acres of silage. Milk accounts for 92 percent of the farm's receipts.

NYCD400 A 400-cow Central New York (Cayuga County) large dairy farm that produces 22,819 pounds of milk per cow. The farm plants 110 acres of hay, 310 acres of silage, and 470 acres of haylage. The farm generates 93 percent of its receipts from milk.

VTD134 A 134-cow Vermont (Washington County) moderate size dairy farm that averages 19,285 pounds of milk per cow. The farm plants 46 acres of hay, 94 acres of silage, and 81 acres of haylage. Milk accounts for 89 percent of the receipts.

VTD350 A 350-cow Vermont (Washington County) large dairy farm that averages 23,490 pounds of milk per cow. The farm plants 40 acres of hay, 350 acres of silage, and 310 acres of haylage. Milk accounts for 94 percent of the farm's receipts.

Appendix Table A7. Characteristics of Panel Farms Producing Milk for 2000.

	WID70	WID600	MIED200	MICD140	NYWD800	NYWD1200	NYCD110	NYCD400	VTD134	VTD350
County	Winnebago	Winnebago	Sanilac	Isabella	Wyoming	Wyoming	Cayuga	Cayuga	Washington	Washington
Total Cropland	245	1,000	590	510	1,200	1,800	296	850	220	700
Acres Owned	200	400	363	300	900	1,200	250	650	100	525
Acres Leased	45	600	227	210	300	600	46	200	120	175
Pastureland										
Acres Owned	0	0	50	25	225	300	20	400	120	50
Acres Leased	0	0	0	0	0	0	0	0	0	50
Assets ($1000)										
Total	716	3,054	1,664	1,293	4,739	7,051	849	2,830	717	2,097
Real Estate	431	1,209	908	664	2,168	2,764	385	1,280	300	1,245
Machinery	128	277	299	257	600	822	89	316	154	362
Other & Livestock	157	1,568	458	372	1,971	3,465	376	1,234	262	490
Debt/Asset Ratios										
Total	0.21	0.15	0.23	0.30	0.15	0.14	0.15	0.12	0.28	0.22
Intermediate	0.20	0.05	0.25	0.35	0.09	0.09	0.09	0.05	0.29	0.14
Long Run	0.21	0.30	0.22	0.26	0.22	0.22	0.23	0.22	0.26	0.27
2000 Gross Receipts ($1,000)*										
Total	216.9	1,708.4	643.1	435.6	2,826.5	4,283.5	382.4	1,427.4	380.0	1,194.5
Milk	193.5	1,589.0	589.0	370.8	2,652.4	4,054.4	349.8	1,325.2	336.6	1,120.2
	89.20%	93.00%	91.60%	85.10%	93.80%	94.70%	91.50%	92.80%	88.60%	93.80%
Dairy Cattle	22.9	119.4	47.5	54.5	174.1	229.0	32.6	86.6	41.9	74.3
	10.50%	7.00%	7.40%	12.50%	6.20%	5.30%	8.50%	6.10%	11.00%	6.20%
Silage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.5	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.10%	0.00%	0.00%
Wheat	0.0	0.0	6.6	10.2	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	1.00%	2.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	0.00%
2000 Planted Acres**										
Total	235.0	1,001.0	590.0	490.0	1,200.0	1,525.0	275.0	890.0	220.2	700.0
Hay	150.0	623.0	0.0	70.0	625.0	0.0	80.0	580.0	220.2	700.0
	63.80%	62.20%	0.00%	14.30%	52.10%	0.00%	29.10%	65.20%	100.00%	100.00%
Silage	0.0	378.0	320.0	175.0	575.0	1,525.0	131.0	310.0	0.0	0.0
	0.00%	37.80%	54.20%	35.70%	47.90%	100.00%	47.60%	34.80%	0.00%	0.00%
Corn	45.0	0.0	220.0	175.0	0.0	0.0	64.0	0.0	0.0	0.0
	19.10%	0.00%	37.30%	35.70%	0.00%	0.00%	23.30%	0.00%	0.00%	0.00%
Wheat	0.0	0.0	50.0	70.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	8.50%	14.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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**Acreages for 2000 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2000 CHARACTERISTICS OF PANEL FARM PRODUCING MILK (CONTINUED)

MOD85 A 85-cow Southwestern Missouri (Christian County) moderate size dairy farm that averages 18,057 pounds of milk per cow. The farm plants 220 acres of hay and 40 acres of silage. About 85 percent of the farm's receipts come from milk.

MOD330 A 330-cow Southwestern Missouri (Christian County) large dairy farm that averages 19,976 pounds of milk per cow. The farm plants 415 acres of hay, 170 acres of haylage, and 180 acres of silage. Milk accounts for 91 percent of this farm's receipts.

GAND200 A 200-cow Central Georgia (Putnam County) moderate size dairy farm that produces 18,894 pounds of milk per cow. Rather than plant any crops, this farm opts to purchase all of its feed requirements in the form of a premixed ration. Milk accounts for 94 percent of the farm's gross income.

GASD700 A 700-cow Southern Georgia (Houston County) large dairy farm that produces 18,894 pounds of milk per cow. The farm plants 174 acres of hay and 466 acres of silage. Milk makes up 95 percent of the farm's receipts.

FLND500 A 500-cow North Florida (Lafayette County) moderate size dairy farm that averages 16,597 pounds of milk per cow. The farm grows 125 acres of hay. All feed requirements, in addition to hay, are met through a purchased pre-mixed ration. Milk sales account for 93 percent of the farm's receipts.

FLSD1800 A 1,800-cow South Central Florida (Okeechobee County) large dairy farm that produces 15,605 pounds of milk per cow. The farm grows 400 acres of hay and 400 acres of silage. In addition to grass hay, grass silage, and pasture, cows receive a purchased premixed ration. Milk sales generate 95 percent of its receipts.

Appendix Table A8. Characteristics of Panel Farms Producing Milk for 2000.

	MOD85	MOD330	GAND200	GASD700	FLND500	FLSD1800
County	Christian	Christian	Putnam	Houston	Lafayette	Okeechobee
Total Cropland	260	685	200	507	590	1,800
Acres Owned	180	450	200	400	440	1,800
Acres Leased	80	235	0	107	150	0
Pastureland						
Acres Owned	55	20	0	150	60	0
Acres Leased	55	20	0	0	0	0
Assets ($1000)						
Total	853	2,050	600	4,522	1,930	4,970
Real Estate	562	1,036	111	2,315	856	3,091
Machinery	130	260	78	325	217	249
Other & Livestock	161	753	411	1,881	857	1,630
Debt/Asset Ratios						
Total	0.43	0.15	0.73	0.14	0.14	0.33
Intermediate	0.83	0.09	0.54	0.04	0.05	0.45
Long Run	0.22	0.21	1.58	0.23	0.25	0.26
2000 Gross Receipts ($1,000)*						
Total	215.2	878.1	602.5	2,387.2	1,602.8	5,319.9
Milk	183.4	797.6	567.7	2,267.4	1,497.3	5,068.1
	85.20%	90.80%	94.20%	95.00%	93.40%	95.30%
Dairy Cattle	31.8	80.5	34.9	119.8	105.5	251.8
	14.80%	9.20%	5.80%	5.00%	6.60%	4.70%
Silage	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Receipts	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2000 Planted Acres**						
Total	260.0	765.0	0.0	640.0	125.0	800.0
Hay	220.0	765.0	0.0	407.0	125.0	800.0
	84.60%	100.00%	0.00%	63.60%	100.00%	100.00%
Silage	40.0	0.0	0.0	233.0	0.0	0.0
	15.40%	0.00%	0.00%	36.40%	0.00%	0.00%
Corn	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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**Acreages for 2000 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2000 CHARACTERISTICS OF PANEL FARMS PRODUCING BEEF CATTLE

MTB500 A 500-cow ranch located in the eastern plains of Montana (Custer County). The ranch runs cows on a combination of owned, federal, state, and private lease land. One quarter of its total animal unit month grazing needs come from federal land and the ranch owns 14,000 acres of pasture. Of the total land owned, 720 acres are planted for hay. Cattle generate 100 percent of the total receipts on the ranch.

WYB300 A 300-cow ranch located in North Central Wyoming (Washakie County). The ranch harvests hay from 200 acres of owned cropland, and it owns another 1000 acres of pastureland. Rangeland leased from the Forest Service provides 42 percent of the ranch's grazing needs. Cattle generate 100 percent of the total receipts on the ranch.

COB250 A 250-cow ranch located in Northwest Colorado (Routt County). Federal land provides 7 percent of the ranch's AUM needs. Hay is produced on 450 acres of the pasture-hay land, of which the ranch owns 300. The ranch owns 1800 acres of pastureland, and the cattle graze the federal land during the summer months. Cattle generate 88 percent of the total receipts on the ranch. This ranch participates in a retained ownership/backgrounding program with 75 percent of the steers raised.

MOB150 A 150-cow farm in Southwest Missouri (Dade County). The farm generates 58 percent of its receipts from beef cattle and the remainder from crops. The farm has 40 acres of sorghum, 40 acres of corn, 80 acres of soybeans, 80 acres of double cropped soybeans and wheat, and 400 acres of hay. Crop sales make up 34 percent of cash receipts.

OTHER Nine other representative farms have beef cattle operations in conjunction with their crop production (MONG1400, TXBG2000, TXBG2500, TNG900, KSSW3180, KSNW4300, TXBC1400, TXR3750, and TXRP2500). These farming operations have from 20 to 200 mother cows in their cow/calf herds and cattle provide from 4 to 30 percent of the receipts on these farms.

Appendix Table A9. Characteristics of Panel Farms Producing Beef Cattle for 2000.

	MTB500	WYB300	COB250	MOB150
County	Custer	Washakie	Routt	Dade
Total Cropland	0	200	450	440
Acres Owned	0	200	300	320
Acres Leased	0	0	150	120
Pastureland				
Acres Owned	14,000	1,000	1,800	320
Acres Leased	0	0	0	80
Federal AUMs Leased	1,350	1,800	250	0
State/Private AUMs	5,180	0	630	0
Assets ($1000)				
Total	2,406	3,537	6,745	921
Real Estate	1,781	3,156	6,392	596
Machinery	73	95	108	186
Other & Livestock	552	285	245	138
Debt/Asset Ratios				
Total	0.11	0.04	0.01	0.08
Intermediate	0.20	0.18	0.08	0.17
Long Run	0.07	0.02	0.01	0.03
Number of Livestock				
Beef Cows	500	300	250	150
2000 Gross Receipts ($1,000)*				
Total	272.0	159.5	118.7	136.9
Cattle	272.0	159.5	104.6	79.2
	100.00%	100.00%	88.10%	57.90%
Corn	0.0	0.0	0.0	7.1
	0.00%	0.00%	0.00%	5.20%
Sorghum	0.0	0.0	0.0	9.0
	0.00%	0.00%	0.00%	6.60%
Soybeans	0.0	0.0	0.0	20.8
	0.00%	0.00%	0.00%	15.20%
Wheat	0.0	0.0	0.0	11.1
	0.00%	0.00%	0.00%	8.10%
Hay	0.0	0.0	8.1	9.7
	0.00%	0.00%	6.80%	7.10%
Other Receipts	0.0	0.0	6.0	0.0
	0.00%	0.00%	5.10%	0.00%
2000 Planted Acres**				
Total	720.0	200.0	450.0	720.0
Corn	0.0	0.0	0.0	40.0
	0.00%	0.00%	0.00%	5.60%
Sorghum	0.0	0.0	0.0	40.0
	0.00%	0.00%	0.00%	5.60%
Soybeans	0.0	0.0	0.0	160.0
	0.00%	0.00%	0.00%	22.20%
Wheat	0.0	0.0	0.0	80.0
	0.00%	0.00%	0.00%	11.10%
Hay	720.0	200.0	450.0	400.0
	100.00%	100.00%	100.00%	55.60%

*Receipts for 2000 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2000 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2000 CHARACTERISTICS OF PANEL FARMS PRODUCING HOGS

ILH180 A 180-sow hog farm located in Western Illinois (Knox County). The farm plants 700 acres of corn and 700 acres of soybeans. This farm weans 17 pigs/sow/year and operates on 3.5 pounds of feed per pound of pork sold. The hog operation produces about 55 percent of the farm's total receipts while the sale of crops accounts for about 45 percent.

ILH650 A 650-sow hog farm located in Western Illinois (Knox County). The farm plants 1,072 acres of corn and 878 acres of soybeans. This farm will wean an average of 22 pigs per sow in a year, and feeds about 3.1 pounds of feed per pound of pork sold in a year. The hog enterprise generates 80 percent of the total receipts on the farm. Corn and soybean sales account for the remaining 20 percent of receipts.

INH200 A 200-sow hog farm located in North Central Indiana (Carroll County). The farm plants 600 acres of corn, 145 acres of soybeans, and 25 acres of wheat. The farm feeds 3.3 pounds of feed per pound of pork sold and weans 17 pigs/sow/year. About 72 percent of the farm's receipts come from hogs, and the remainder of receipts is generated through crop sales.

INH1200 A 1,200-sow hog farm located in North Central Indiana (Carroll County). The farm plants 2,066 acres of corn, 1,034 acres of soybeans, and 100 acres of wheat. The farm is able to wean 20 pigs per sow per year and feed 3.3 pounds of feed per pound of pork sold. The hog operation accounts for approximately 81 percent of the farm's total receipts. The other quarter of receipts comes from crop sales.

NCH350 A 350-sow hog farm located in Eastern North Carolina (Wayne County). The farm plants 100 acres of hay to dispose of waste from the farrow-to-finish hog operation, but does not plant any crops for feed. All feed for the operation is purchased. The farm will wean 19.5 pigs per sow per year and will feed 3.0 pounds of feed per pound of pork sold. The sale of hogs produces 100 percent of the farm's receipts.

NCH13268 A 13,268-sow hog farm located in Eastern North Carolina (Wayne County). The operation contracts with individual farmers who provide on-site management, labor, and facilities. The operation provides hogs, purchased feed and specialized labor for its group of contract farrowing, nursery and finishing farms. On average the farm will wean 20 pigs per sow per year. A measure of feed efficiency for this operation is 2.9 pounds of feed per pound of pork sold. 100 percent of the farm's receipts are produced from the sale of hogs.

Appendix Table A10. Characteristics of Panel Farms Producing Hogs for 2000.

	ILH180	ILH650	INH200	INH1200	NCH350	NCH13268
County	Knox	Knox	Carroll	Carroll	Wayne	Wayne
Total Cropland	1,400	1,950	770	3,200	100	0
Acres Owned	140	975	460	1,038	100	0
Acres Leased	1,260	975	310	2,162	0	0
Pastureland						
Acres Owned	0	0	0	0	0	0
Acres Leased	0	0	0	0	0	0
Assets ($1000)						
Total	1,525	6,587	2,042	6,349	1,244	18,348
Real Estate	762	4,214	1,657	3,963	725	1
Machinery	324	727	224	1,067	87	25
Other & Livestock	439	1,646	161	1,319	431	18,322
Debt/Asset Ratios						
Total	0.20	0.22	0.25	0.22	0.23	0.05
Intermediate	0.14	0.11	0.14	0.17	0.10	0.05
Long Run	0.26	0.28	0.27	0.25	0.32	0.25
Number of Livestock						
Sows	180	650	200	1,200	350	13,268
2000 Gross Receipts ($1,000)*						
Total	586.7	1,997.7	494.3	3,374.2	798.8	29,538.3
Hogs	321.1	1,601.6	353.7	2,741.9	798.8	29,538.3
	54.70%	80.20%	71.60%	81.30%	100.00%	100.00%
Corn	115.9	112.0	103.8	307.6	0.0	0.0
	19.80%	5.60%	21.00%	9.10%	0.00%	0.00%
Soybeans	147.0	284.1	31.8	298.5	0.0	0.0
	25.00%	14.20%	6.40%	8.80%	0.00%	0.00%
Wheat	0.3	0.0	5.1	26.3	0.0	0.0
	0.00%	0.00%	1.00%	0.80%	0.00%	0.00%
Other Receipts	2.5	0.0	0.0	0.0	0.0	0.0
	0.40%	0.00%	0.00%	0.00%	0.00%	0.00%
2000 Planted Acres**						
Total	1,400.0	1,950.0	770.0	3,200.0	0.0	0.0
Corn	700.0	1,072.5	600.0	2,066.0	0.0	0.0
	50.00%	55.00%	77.90%	64.60%	0.00%	0.00%
Soybeans	700.0	877.5	145.0	1,034.0	0.0	0.0
	50.00%	45.00%	18.80%	32.30%	0.00%	0.00%
Wheat	0.0	0.0	25.0	100.0	0.0	0.0
	0.00%	0.00%	3.20%	3.10%	0.00%	0.00%
Hay	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

*Receipts for 2000 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2000 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

APPENDIX B:

LIST OF PANEL FARM COOPERATORS

FEED GRAIN FARMS

Iowa

Facilitators

Mr. Jim Patton - Webster County Extension Agent

Panel Participants

Mr. Phil Naeve
Mr. Larry Lynch
Mr. Don Sandell
Mr. Bob Anderson
Mr. Larry Lane
Mr. Perry Black
Mr. Britt Shelton
Mr. Loren Wuebker
Mr. Dennis Ammen
Mr. John Ricke
Mr. Virgil Gordon
Mr. Merv Berg
Mr. and Mrs. Jim Carver

Nebraska

Facilitators

Mr. Gary Hall-Phelps County Extension Agent, Cooperative Extension Service
Dr. Roger Selley - Extension Farm Management Specialist, University of Nebraska
Mr. Joe Trujillo-University of Missouri-Colombia

Panel Participants

Mr. Kerry Blythe
Mr. Frank Hadley
Mr. Brian Johnson
Mr. Gary Robinson
Mr. Tony Davis
Mr. Phil High
Mr. Johnny C. Nelson
Mr. Tom Schwarz

Missouri

Facilitator

Mr. Parman Green - Farm Management Specialist, University of Missouri - Columbia

Panel Participants

Mr. Ron Gibson
Mr. Glen Kaiser
Mr. Gerald Kitchen
Mr. Mike Hisle
Mr. Ron Linneman
Mr. James Wheeler
Mr. Jack Harriman

Texas - Northern High Plains

Facilitators

Mr. Robert Harris - Moore County Agricultural Extension Agent
Dr. Steve Amosson - Extension Economist - Management, Texas A&M University

Panel Participants

Mr. Ellis Moore
Mr. Tom Moore
Mr. Brent Clark
Mr. Kelly Hays
Mr. Jerry Trussell
Mr. Kelly Williams
Mr. Kerri Cartwright
Mr. Rick May
Mr. Clyde Tims

FEED GRAIN FARMS (CONTINUED)

Northern Missouri

Facilitator

Mr. Mike Killingsworth - Farm Management Consultant, Maryville, Missouri
Mr. Joe Trujillo-University of Missouri-Colombia

Panel Participants

Mr. Jack Baldwin
Mr. Roger Vest
Mr. Kevin Rosenbohm
Mr. Don Mobley
Mr. Gary Ecker

South Carolina

Facilitator

Mr. Toby Boring - Extension Agricultural Economist, Clemson University

Panel Participants

Mr. Harry DuRant
Mr. John Ducworth
Mr. Tom Jackson
Mrs. Vikki Brogdon
Mr. Leslie McIntosh
Mr. Woody Green
Mr. Steve Lowder
Mr. Billy Davis
Mr. John Deschamps
Mr. Chris Cogdill
Mr. Tim Barnes
Mr. Sammy or Rey Burrows

Tennessee

Facilitator

Dr. Daryll Ray, Professor, University of Tennessee

Panel Participants

Mr. Edwin Alles
Mr. Donald Parker
Mr. Greg Story
Mr. Paul Wengerd
Mr. Jack Ogg
Mr. Doug Schoolfield
Mr. Daniel Wengerd
Mr. James Yarbro

Texas - Central Blacklands

Facilitators

Mr. Bill Buxkemper - County Extension Agent, Agriculture, Hill County
Mr. Donald Kelm - County Extension Agent, Agriculture, Falls County

Panel Participants

Mr. Kenneth Machac
Mr. Lanny Neil
Mr. Barney Pastejoysky
Mr. John Sawyer
Mr. Aaron Walters
Mr. Ben Dieterich, Jr.
Mr. Keith Drews
Mr. R.L. Kuretsch
Mr. Gary Strabanet
Mr. Tom Zander

WHEAT FARMS

Washington

Facilitators

Mr. John Burns - Whitman County Agricultural Extension Agent
Dr. Herb Hinman - Extension Economist, Washington State University

Panel Participants

Mr. Brian Largent
Mr. Bruce Nelson
Mr. Asa Clark
Mr. David Harlow
Mr. Todd Scholz
Mr. Gary Largent
Mr. John Whitman
Mr. Hank Suess
Mr. Randy Suess

North Dakota

Facilitators

Mr. Shawn Vachal - Barnes County Extension Agent
Mr. Dwight Aakre - Extension Associate - Farm Management, North Dakota State University

Panel Participants

Mr. Mike Clemens
Mr. Arvid Winkler
Mr. Wade Bruns
Mr. Jack Formo
Mr. Jim Broten
Mr. Ray Haugen
Mr. Anthony Thilmony
Mr. Leland Guscette
Mr. Greg Shanenko
Mr. Charles Triebold

South Central Kansas

Facilitators

Mr. Fred Delano-Farm Management Program, Kansas State University
Mr. Gerald Le Valley - Sumner County Agricultural Extension Agent
Mr. Brad Goehring - Sedgwick County Extension Agent
Mr. Steve Westfahl - Sedgwick County Extension Agent

Panel Participants

Mr. Robert White
Mr. Nick Steffen
Mr. Donald Applegate
Mr. Robert Headley
Mr. Dennis Pettigrew
Mr. Joe Allen
Mr. Tim Turek
Mr. David Messenger
Mr. Rae Reusser
Mr. Jim Stuhlsatz

Colorado

Facilitators

Mr. Paul Gutierrez, DARE, CSU
Mr. Dennis Kaan - Regional Extension Specialist, Colorado State University
Mr. Don Nitchie - Director, Farm Mgmt/Marketing, Colorado State University Cooperative Extension

Panel Participants

Mr. Terry Kuntz
Mr. Marlin Snyder
Mr. John Wright
Mr. Cliff Fletcher
Mr. David Foy
Mr. Leland Willeke
Mr. John Hickert
Mr. Bill Rodwell
Mr. Gerry Ohr
Mr. Rick Lewton
Mr. Ken Remington

WHEAT FARMS (CONTINUED)

Northwestern Kansas

Facilitators

Mr. Fred Delano-Farm Management Program, Kansas State University
Mr. Scott Docken - Extension Agricultural Economist, Farm Management Association, KSU
Mr. Mark Wood - Extension Agricultural Economist, Farm Management Association, KSU
Mr. Dan Obrien - Extension Agricultural Economist, Farm Management Association, KSU

Panel Participants

Mr. Harold Mizell
Mr. Brian Laufer
Mr. Lee Jueneman
Mr. Lance Leebrick
Mr. Lyman Goetsch
Mr. Gerald Huessman
Mr. Steve Schertz
Mr. Dennis Franklin
Mr. Rich Calliham
Mr. Vernon Akers

COTTON FARMS

California

Facilitator

Mr. Bruce A. Roberts - Kings County Director and Farm Advisor, University of California Cooperative Extension

Panel Participants

Mr. Mark Hansen
Mr. Craig Pedersen
Mr. Ernie Taylor
Mr. Carlton Duty
Mr. Bo Champlin
Mr. Dave Smith
Mr. Michael Boyette
Mr. Matt Diener
Mr. Jeff Hidebrand

Texas - Southern High Plains

Facilitators

Mr. John Farris - Dawson County Agricultural Extension Agent
Dr. Jackie Smith - Extension Economist - Management, Texas A&M University

Panel Participants

Mr. Milton Schneider
Mr. Dave Nix
Mr. Glen Phipps
Mr. Donald Vogler
Mr. Kent Nix
Mr. Mark Furlow
Mr. Mark Boardman
Mr. Lonny Ferguson
Mr. Todd Gregory
Mr. Thomas Holder
Mr. Brad Boyd
Mr. Jerry Chapman

Texas - Rolling Plains

Facilitators

Mr. Todd Vineyard - Ellis County Agricultural Extension Agent
Mr. Stan Bevers - Extension Economist - Management, Texas A&M University

Panel Participants

Mr. Ronnie Richmond
Mr. Dennis Olson
Mr. Ronnie Riddle
Mr. Ferdie Walker

Texas - Blacklands

Facilitator

Mr. Ronnie Leps - Williamson County Agricultural Extension Agent

Panel Participants

Mr. Donald Stolte
Mr. Herbert Raesz
Mr. Doug Schernik
Mr. Bob Bartosh
Mr. Lonny Rinderknecht

Texas - Coastal Bend

Facilitators

Mr. Jeffrey Stapper - San Patricio-Aransas County Extension Agent
Dr. Larry Falconer - Extension Economist - Management, Texas A&M University

Panel Participants

Mr. Brad Bickham
Mr. Clarence Chopelas
Mr. Darby Salge

COTTON FARMS (CONTINUED)

Tennessee

Facilitator

Dr. Daryll Ray, Professor, University of Tennessee

Panel Participants

Mr. Harris Armour, III
Mr. Eugene McFerren
Ms. Lee Ann Rhea
Mr. Travis London
Mr. Tom Karcher
Mr. Mark McNabb
Mr. Dewayne Hendrix
Mr. Ronald Woods

RICE FARMS

Arkansas

Facilitator

Bill Free - Riceland Foods

Panel Participants

Mr. Jerry Burkett
Mr. Dusty Hoskyn
Mr. Derek Bohanan
Mr. David Jessup
Mr. Monty Bohanan

Texas

Facilitator

Dr. Ed Rister - Professor, Texas A&M University

Panel Participants

Mr. W. A. "Billy" Hefner, III
Mr. Ronald Gertson
Mr. Jim Wiese
Mr. Glen Rod
Mr. Kenneth "Peter" Stelzel
Mr. Steve Balas
Mr. Andy Anderson
Mr. Madison H. Smith
Mr. John Waligura
Mr. Layton Raun
Mr. Jason Hlavinka

California

Facilitator

Mr. Jack Williams - Farm Advisor, Sutter and Yuba Counties, Univ. of California Cooperative Extension

Panel Participants

Mr. Bill Baggett
Mr. Jack DeWitt
Mr. Don Staas
Mr. Ned Lemenager
Mr. Frank Rosa
Mr. Wayne Vineyard
Mr. Paul Lower
Mr. Scott Tucke

Missouri

Facilitators

Mr. Bruce Beck - Farmer's Agronomy Specialist, University of Missouri - Columbia
Mr. David Guethle - Area Agronomy Specialist, University of Missouri - Columbia
Mr. Peter Zimmel - University of Missouri-Columbia

Panel Participants

Mr. Sonny Martin
Mr. Bruce Yarbro
Mr. C. P. Johnson
Mr. Davis Minton
Mr. Floyd Page
Mr. Dale Conner
Mr. Fred Tanner
Mr. J. D. Sifford
Mr. Mike Mick
Mr. Rick Spargo
Mr. Cloyce Sowell

Louisiana

Facilitators

Mr. Eddie Eskew - County Agent, Louisiana Cooperative Extension Service
Mr. Howard J. Cormier - County Agent, Louisiana Cooperative Extension Service
Mr. Ronnie Levy - County Agent/Parrish Chairman, Louisiana Cooperative Extension Service
Mr. D. L. Eugene (Gene) Johnson - Specialist in Marketing, Louisiana Cooperative Extension Service, Natural Resources and Economic Development

Panel Participants

Mr. Alden Horten
Mr. Tommy Faulk
Mr. Jackie Loewer
Mr. Brian Wild
Mr. Allan McLain

DAIRY FARMS

California

Facilitator

Mr. Larry Serpa - Land O' Lakes

Panel Participants

Mr. Dave Rebeiro
Mr. Bill Van Beek
Mr. Phillip Rebeiro
Mr. Jeff Wilbur

New Mexico

Facilitator

Dr. Robert Schwart - Professor and Extension Economist, Texas A&M University

Panel Participants

Mr. Joe Gonzalez
Mr. Bill Davis
Mr. Bob Wade
Mr. Marc Reischman
Mr. Mike Visser

Washington

Facilitator

Mr. Robert Dyk - Watcom County Agricultural Extension Agent

Panel Participants

Mr. Ron Bronsema
Mr. Rod DeJong
Mr. Greg McKay
Mr. Ed Pomeroy
Mr. Keith Boon
Mr. Dick Bengen
Mr. Peter Vlas

Idaho

Facilitator

Mr. Dean Falk - Extension Dairy Specialist, University of Idaho
Dr. Wilson Grey - Farm Management Specialist - University of Idaho

Panel Participants

Mr. & Mrs. Martin Lee
Mr. Michael Quesnell
Mr. Bill Stouder
Mr. John Beukers
Mr. Adrian Boer
Mr. Alan Gerratt
Mr. Randy Tolman
Dennis Edlund
Mr. Harry Hoagland
Mr. Greg Ledbetter
Mr. Rick Thompson
Mr. Jack Van Beek
Mr. Reagon Hatch
Mr. Hank Hafliger
Mr. Kurt Alberdi
Ms. Anna Sybrandy

Texas - Central

Facilitator

Mr. Joe Pope - Erath County Agricultural Extension Agent

Panel Participants

Mr. Lane Jones
Mr. Leonard Moncrief
Mr. Jake Van Vliet
Mr. Lonnie Hammonds
Mr. Jack Parks
Mr. Owen Sieperda

Texas - Eastern

Facilitator

Mr. Ron Tosh - Dairy Farmers of America, Field Supervisor

Panel Participants

Mr. Jimmy Barnhart
Mr. Burk Bullock
Mr. Allan Caddell
Mr. Gary Overstreet
Mr. Richard Fannin
Mr. Douwe Plantinga

DAIRY FARMS (CONTINUED)

Missouri

Facilitator

Mr. Stacey Hamilton – Greene County Dairy Specialist

Panel Participants

Mr. Allen Sulgrove
Mr. & Mrs. Freddie Martin
Mr. Joe Peebles
Mr. John McArthur
Mr. & Mrs. Doug Owen
Mr. Wayne Whitehead
Mr. Larry Winfree

Michigan

Facilitator

Mr. Dan Bollinger - County Extension Agent - Clinton County
Mr. Mike McFadden - County Extension Agent - Isabella County
Mr. Dennis Stein-District Farm Business Management Agent
Dr. Craig Thomas - County Extension Agent - Sanilac County

Panel Participants

Mr. Ken Halfmann
Mr. Dwight Bartte
Mr. Jason Shinn
Mr. Albert Steenblik
Mr. Mike Fagan
Mr. Duane Stuever

Florida

Facilitators

Mr. Chris Vann - Lafayette County Agricultural Extension Agent
Mr. Art Darling - Sunshine State Milk Producers

Panel Participants

Mr. Morris Jackson
Mr. Bobby Koon
Mr. Louis Shiver
Mr. Bob Butler
Mr. Glynn Rutledge
Mr. Everett Kerby
Mr. Terry Reagan
Mr. Roger Butler
Mr. Ray Melear
Mr. Bob Rydzewski

Wisconsin

Facilitator

Mr. Jeff Key - Winnebago County Agricultural Extension Agent

Panel Participants

Mr. David Allen
Mr. Jeff Bradley
Mr. Kevin Condon
Mr. Larry Engel
Mr. Dan Flood
Mr. Fred Kasten
Mr. Ronald Miller
Mr. Jeffery Pollack
Mr. Don Sleik
Mr. Joe Bonlender
Mr. John Ruedinger
Mr. Dave Bradley
Mr. Michael Hinz
Mr. Vernon Newhouse
Mr. Glenn Armstrong
Mr. Patrick Brennand
Dr. Robert Cropp
Mr. Jerome Evers
Mr. Ben Hughes
Mr. Jeff Meulmens
Mr. Tom Murphy
Mr. Mike Schmidt
Mr. Pete Van Wychen
Mr. Pete Knigge
Mr. Dean Hughes
Mr. Gary Frank
Ms. Linda Hodorff
Mr. Larry Pollack

DAIRY FARMS (CONTINUED)

Georgia

Facilitator

Mr. Bill Thomas - Professor and Extension Economist, University of Georgia
Mr. Bobby Smith - Mogan County Extension Agent

Panel Participants

Mr. Zippy DuVall
Mr. Mike Rainey
Mr. Everett Williams
Mr. Terry Camp
Mr. Bernard Sims
Mr. John Bernard
Mr. Henry Cabiness
Mr. Carlton McMichael
Mr. Joe West
Mr. Lane Ely
Mr. Bill Boyce
Mr. Terry Embry
Mr. Lamar Anthony

New York - Western

Facilitator

Mr. Steve Richards – Cornell Cooperative Extension

Panel Participants

Mr. Walter Faryns
Mr. Collin Broughton
Mr. George Mueller
Mr. John Noble
Mr. Kent Miller
Mr. Bill Fitch
Mr. John Mueller

New York - Central

Facilitator

Dr. Wayne Knoblauch - Professor, Cornell University

Panel Participants

Mr. Gary Mutchler
Mr. Bill Kilcer
Mr. Chuck Benson
Mr. Edie McMahon
Mr. Martin Young
Mr. Robert Howland
Mr. Robert Space
Mr. Mike Learn
Mr. Kenton Patchen

Vermont

Facilitator

Dr. Rick Wackernagel - Professor, University of Vermont

Panel Participants

Mr. Steve Hurd
Mr. Everett Maynard
Mr. Ted Foster
Mr. Onan Whitcomb
Mr. Mark Rogers
Mr. David Conant
Mr. Dennis Mueller
Mr. Kim Harvey
Mr. Stanley Scribner
Mr. Roger Rainville
Ms. Sally Goodrich
Mr. Steven Jones
Mr. Mitch Montagne

BEEF PRODUCERS

Missouri

Facilitators

Joe Trujillo-University of Missouri-Colombia

Panel Participants

Mr. James Nivens
Mr. Chuck Daniel
Mr. Mike Theurer
Mr. Steve Allison
Mr. Gary Wolf
Mr. Randall Eastman
Mr. Ray Dean Hunter
Mr. Brian Gillen

Montana

Facilitators

Mr. Kent Williams - Custer County Agricultural Extension Agent

Panel Participants

Mr. Dee Murray
Mr. Clarence Brown
Mr. Scott Robinson
Mr. Donald Ochsner
Mr. Art Drange
Mr. Jeff Okerman

Colorado

Facilitator

Mr. C.J. Mucklow - Routt County Agricultural Extension Agent

Panel Participants

Mr. Doug Carlson
Mr. Jay Fetcher
Mr. Geoff Blaresle
Mr. Jim Rossi
Mr. Larry Monger
Mr. Robert Bruchez

Wyoming

Facilitators

Mr. Jim Gill, County Extension Agent, Washakie County

Panel Participants

Mr. Gary Rice
Mr. Tom Brewster
Mr. Tim Flitner
Mr. Jim Foreman

HOG FARMS

Illinois

Facilitator

Mr. Don Teel - Retired Knox County Agricultural Extension Agent

Panel Participants

Mr. David Hawkinson
Mr. Tom Grady
Mr. Tim Carlson
Mr. David Bowman
Mr. John Gustafson
Mr. Rob Humphries
Mr. Sterling Saline
Mr. Steve Main
Mr. Don Erickson
Mr. Lance Humphreys
Dr. Donald G. Reeder

Indiana

Facilitator

Mr. Steve Nichols - Carroll County Agricultural Extension Agent

Panel Participants

Mr. Rick Brown
Mr. Brad Burton
Mr. Richard Skiles
Mr. Allen Stout
Mr. Levi Huffman
Mr. Fred Wise
Mr. Jim Yost

North Carolina

Facilitators

Mr. Mike Regans - Wayne County Agricultural Extension Agent
Dr. Kelly Zering - Associate Professor and Extension Specialist, North Carolina State University
Mr. Jeff Chandler - Wayne County Agricultural Extension Agent

Panel Participants

Mr. Ben Outlaw
Mr. David Harrell Overman
Mr. Charlie McClenny
Mr. Ronald Parks
Mr. David Sanderson
Mr. Frankie Warren
Mr. Jeff Hansen
Mr. John Dawson
Mr. R.H. Mohesky

A policy working paper is designed to provide economic research on a timely basis. It is an interim product of a larger AFPC research project which will eventually be published as a policy research report. These results are published at this time because they are believed to contain relevant information to the resolution of current policy issues. AFPC welcomes comments and discussions of these results and their implications. Address such comments to the author(s) at:

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